

Universal Terminology

HELP ON TAXONOMIC LISTS

This document presents a complete description of the Taxonomic Lists. It explains how to access any list of this type, how to navigate between lists from a general to a specific scope and vice-versa, what is their content and how to access the related external sources of information.

This help file is the chapter 12 of the general Help book of the TAH website.

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12.1 Introduction

By convention, in this document and other documents on the TAH documentation, we distinguish anatomical units from anatomical entities. A unit is composed of one to five entities depending on its type. Entities can be generic or specific, but by definition, only generic entities are present in a taxonomy. In taxonomic lists, generic entities are displayed with their hyperlinks to the unit pages.

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 or page. Therefore, an external reference may be out of sync with a particular taxonomy list, because they were prepared on different dates. The user should be aware of this.

12.2 Overview

A typical taxonomic list is shown in Figure 12.1. It consists of five sections, as well as a header and a footer. The taxonomic list itself is divided into two blocks: external references and the list content, which consists of terms in Latin and a modern language.

The overall structure of a list is quite simple, every taxonomic list is composed of seven parts:

- a header with the title of the list,
- a navigation section for interlist navigation,
- a list of the taxonomic ancestors of the entity at the top of the list,
- the partonomic list itself in two blocks, presented in two languages,
- a set of scientific notes relating to specific entities in the list,
- a signature section attesting to the personality of the list,
- a footer with the publication date.

The list itself is composed of seven columns, grouped into three column blocks (from left to right):

- four columns of pointers to external or internal references,
- one column indicating pair entities,
- two columns of terms in Latin and a modern vernacular language.

12.3 Definition of the Taxonomic Lists


Taxonomic List

A taxonomic list (definition) is a list of terms representing entities in the field of anatomy, whose sequence is organized according to the taxonomic hierarchy and whose superior entity is a generic entity, constituting, along with other taxonomic lists, a total partition of the field.

The first assertion is that it is a list based on the taxonomic hierarchy, that is, the hierarchy of classification of a large number of entities, as in zoology or botany. The relation *isa* is the only relation applied to this hierarchy.

The second assertion is that the field of anatomy is naturally divided into body parts, organs, parts of organs, cells, tissues, complexus, etc., and that this total partition is achieved by all taxonomic lists (over 900 lists in total).

The *isa* relationship is formally defined elsewhere in the general documentation. It corresponds to the *genus et differentia* approach as initially proposed by Aristotle. According to this definition, all entities presented in taxonomic lists have strictly *isa* relationships with each other; otherwise, it is an error.

Taxonomic list T3, primary language: LA, subsidiary: EN, interface: EN, work in progress 

ganglion nervi cranialis

▼ LIST NAVIGATION

Home page [TA taxonomy](#)

Top level [complexus anatomicus](#) [Short](#) [Extended](#)

Level 2 [ganglion](#) [Short](#) [Extended](#)

Current level [ganglion nervi cranialis](#)

Subsidiary language with Latin English [French](#) [Spanish](#) [Russian](#)

Non Latin primary language [English](#) [French](#) [Spanish](#) [Russian](#)

▼ ANCESTORS

Help on colors

- [FMA:62955](#) [res anatomica](#)
- [FMA:61775](#) [res physica](#)
- [FMA:67165](#) [res corporea](#)
- [FMA:305751](#) [structura anatomica](#)
- [FMA:67135](#) [structura anatomica postnatalis](#)
- [FMA:49443](#) [complexus anatomicus](#)
- [FMA:83115](#) [complexus partis principalis cellulae](#)
- [FMA:11195](#) [segmentum organi arboris nervosi](#)
- [FMA:5884](#) [ganglion](#)
- [FMA:54502](#) ▼ [ganglion nervi cranialis](#)

▼ TAXONOMIC LIST

FMAID	TA	UID	Pair	Short official Latin term	Short English equivalent
54502		6328		ganglion nervi cranialis	cranial ganglion
52618		6380		ganglion trigeminale ; ganglion semilunare	trigeminal ganglion ; semilunar ganglion
53414		6482		ganglion geniculi nervi facialis	geniculate ganglion of facial nerve
		9292		ganglion vestibulocochleare	vestibulocochlear ganglion
53445		6500		ganglion cochleare ; ganglion spirale	cochlear ganglion ; spiral ganglion
53435		6489		ganglion vestibulare	vestibular ganglion
53471		9978		ganglion glossopharyngeum	glossopharyngeal ganglion
53474		6502		ganglion superius nervi glossopharyngei	superior ganglion of glossopharyngeal nerve
53475		6503		ganglion inferius nervi glossopharyngei ; ganglion petrosum	inferior ganglion of glossopharyngeal nerve ; petrous ganglion
53472		9979		ganglion nervi vagi	ganglion of vagus nerve
6229		6520		ganglion superius nervi vagi ; ganglion jugulare nervi vagi	superior ganglion of vagus nerve ; jugular ganglion of vagus nerve
6230		6523		ganglion inferius nervi vagi ; ganglion nodosum	inferior ganglion of vagus nerve ; nodose ganglion
				12 items	
				28 entities	

▼ SCIENTIFIC NOTES

Date: 18.03.2022

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Figure 12.1: Structure of a taxonomic list in five sections, on **cranial ganglion**. Three sections are open, and the *Scientific Notes* and *Signature* sections are closed. This list provides all the cranial nerve ganglia existing in the **T_{logy}** and allows them to be easily found in the partonomic lists.

UID	Description	T1	T2	T3	T4	Lists	Units
10153	pars principalis corporis	1				1	9
10153	divisio partis principalis corporis	2	5	5	3	15	237
10153	organum	2	17	35	69	123	1759
10154	pars principalis organi	2	8	144	152	306	5737
10150	systema organi	1				1	12
10152	divisio systematis organi	2	4	2		8	74
10157	cellula	2	6	4	14	26	394
10158	pars principalis cellulae	2	4	6	9	21	174
10155	portio texti	2	7	14		23	294
10156	pars principalis texti	2	7	6		15	154
10161	complexus anatomicus	2	30	95	146	273	3535
10162	vestigium	1				1	20
16525	structura variationis	1				1	4
10127	res incorporea	2	7	30	95	134	1920
	Total	24	95	341	488	948	14323

Table 12.1: The complete set of all taxonomic lists covers the entire terminology, a total of 948 lists consisting of 14,323 units. Each entry is at level T1. Columns T1, T2, T3, and T4 indicate the number of sublists at that level, and the Lists column indicates the total number of lists. The Units column indicates the number of units for that entry. This table was last updated on August 27, 2025.

A major feature of the taxonomic list is its ability to navigate between lists, most often when moving from a global list concerning an entire system to a detailed list representing a specific part of it. This is implemented by defining levels within the lists, from T1 to T4, with the highest values corresponding to the most global lists. A list, regardless of its level, automatically provides links to all other levels when they exist.

In addition, all lists are available in different language combinations. This makes navigation between languages possible at any time. Since translation into any language of the \mathbf{T}_{logy} is automated, users are assured of a unique meaning of corresponding terms in different vernacular languages.

12.4 Presentation

The presentation is divided into 14 sections, covering the entire terminology. The table 12.1 lists all the lists. The size of each entry is represented by the number of units in the right column.

Each section is available in Latin and one of four modern languages: English, French, Spanish, and Russian. Latin can be the primary or secondary language. When Latin is the primary language, English is the interface language. When a modern language is selected as the primary language, it is also selected as the interface language. The language selection is permanent from the moment it is set, but can be changed at any time.

All lists were generated at a specific point in time, specified by the publication date (bottom right of the footer). The list reflects the contents of the terminology database at that time. Therefore, updates made after the publica-

tion date will not be visible.

12.5 Help on content

All taxonomic lists have the same structure: A taxonomic list, the third section under the main entity indicated in the title, is extracted from the \mathbf{T}_{logy} database. All taxonomic lists cover the entire terminological domain.

As noted elsewhere, a list is a granular object of terminology. It has several properties such as its main unit, size, hierarchical structure, etc. Adding an entity to a given list creates a new list. In the source database, the properties of a list are controlled by adding a list signature, which depends on these properties. This signature guarantees the integrity of the list.

In the taxonomy list, the hierarchy is made visible by the indentation of the entities in the presentation. A single indentation corresponds to an *isa* relationship. When an entity in the list has three children, the first appears immediately below with a single indentation, followed by all the entities in its descendant hierarchy with additional indentations. Then, the second child appears with the same indentation as the first child, followed by its descendant hierarchy. Finally, the third child and its descendant hierarchy.

As usual, terms in taxonomy lists are optionally followed by the universal icon (the circled U) when a term is calculated from a universal formula. The dark icon corresponds to a pure universal term with a strict correspondence between the formula and the translated term; the light icon indicates a term inherited from the formula with a minor difference. The absence of an icon means that the term is specific to a vernacular language and incompatible with the universal formula. It can be regular according to the formal grammar of terms (see documentation elsewhere), or irregular. Only regular terms are guaranteed to be correctly processed in all situations. The regularity of terms is the responsibility of the national committees, acting on behalf of their languages.

The five left-hand columns of the taxonomic list are hyperlinks or icons, referencing the unit in that row in five relevant contexts. Some positions may be empty, meaning the entity was not found there. The five positions are:

- the Fundamental Model of Anatomy (FMA) for the relevant unit;
- the Terminologia Anatomica, version 1998 (TA98), the reference terminology for human anatomy, published by the IFAA for the relevant unit;
- the Terminologia Anatomica Humana (TAH) unit page for the relevant unit;
- the partonomic list containing the relevant unit;
- an icon indicating that the relevant unit is pair.

The third reference is to the TAH website (<http://ifaa.unifr.ch>).

12.6 Item description

All the headings in a taxonomic list are then reviewed. The order of presentation is from top to bottom and from left to right.



Universal
icon

Header introductory text This text distinguishes this list from other lists of the same type. It indicates the level T1 to T4 of this taxonomic list as well as the main language, subsidiary language, and presentation language.

Taxonomic list title This is the main Latin term of the top entity in the list. The universal sign – a circled U – may appear to the right of this term. This means that the term is directly calculated from a universal formula.

Help file icon This icon directly calls this document.

List Navigation Section Title

Starting Page Caption This line contains a link back to the taxonomy's starting page.

Top Level Caption This line contains two links to the T1-level list, which contains the current list. The *abbreviated* link leads to the short list with closed sublists. The *extended* link leads to the list with all open sublists. This caption only exists if the current level is below T1.

Level 2 Caption This line contains two links to the T2-level list, which contains the current list. The *abbreviated* link leads to the short list with closed sublists. The *extended* link leads to the list with all open sublists. This legend only exists if the current level is lower than T2.

Level 3 Caption This line provides two links to the T3 level list, which contains the current list. The *abbreviated* link leads to the short list with closed sublists. The *extended* link leads to the list with all open sublists. This caption only exists if the current level is below T3.

Current Level Caption This line is for informational purposes only and does not provide any navigation links.

Subsidiary Language Caption with Latin This line provides all links to presentations in Latin with a subsidiary language of user's choice. In this case, the interface language is English.

Non-Latin Main Language Caption This line provides all links to presentations in the chosen language with Latin as the subsidiary language. In this case the interface language is the chosen language.

Ancestors Section Title

FMA Link See below.

Ancestor Term The list of ancestors of the top entity is given in this section up to the top of the taxonomy. The language is the main language. Each term acts as a hyperlink to the corresponding unit page.

Title of Taxonomy List Section

Column Captions A taxonomy list has 7 columns. The first 3 contain hyperlinks to the FMA, TA98, and the TAH website. The fourth points to the paronomic list containing the current entity. The fifth designates the entity's pair property. The last 2 columns contain the Latin terms designating an entity and the modern language selected for the list.

FMA Link When an entity in the list has an equivalent entity in the FMA, its FMA identifier is indicated, acting as a hyperlink to a representative FMA website (<https://bioportal.bioontology.org/ontologies/FMA/>). This website will open on the selected entity when accessing a taxonomic list. Hyperlinks remain active when the list is stored locally or shared between users.

The FMA link establishes a correspondence between TAH and FMA entities. Its accuracy is not guaranteed, and the authors of the TAH terminology cannot rule out the possibility of divergent meanings.

TA98 Link When an entity in the list is identical to an existing TA98 entity, the TA98 icon (Da Vinci's homunculus) is displayed, serving as a hyperlink to a representative TA98 website (<https://ifaa.unifr.ch/Public/EntryPage/HomePublicNew.html>). This website will open on the selected entity. Hyperlinks remain active when the list is stored locally or shared between users.

The correspondence between TAH and TA98 is guaranteed to be exact, as both terminologies use common identifiers, as first published on the TA98 website in 2013.

Link to Unit Page Each entity in the list is a constituent part of a unit, whose identifier is displayed and serves as a link to its unit page.

Link to Corresponding Partonomic List Each entity in the list can be examined in the part list that contains it.

Icon for Pair Entities A dedicated icon is displayed when the unit is an even unit.

Latin Terms Latin terms group, separated by semicolons, the main term and up to three synonyms of the Latin versions of the terms in this entity. Each term can be followed to its right by the universal icon when calculated from a universal formula.

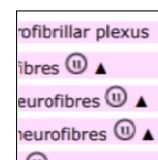
Modern Language Terms Modern language terms are similar to Latin for the selected modern language. In English, terms are in British English. When American English is different, a black triangle is displayed.

Number of Rows The penultimate row of the taxonomy list indicates the total number of rows in the list (excluding the column heading row and the current row).

Number of Entities The last line of the taxonomic list gives the number of entities. This number is equal to the number of lines plus twice the number of even units.

Section Title: Scientific Notes

Column Captions This section has two columns. The first indicates the unit identifier (UID) to which the note is attached. The second column contains the note itself, in free text in English.



The British/American Flag

Unit Identifier A scientific note is attached to a unit in the taxonomic list, marked by a downward-pointing arrow, whose identifier is displayed.

Text of Scientific Note This text is given in English only. A note is an explanatory text about the unit identified in the first column, as well as references to scientific publications.

Section Title Signature The content of this section is described elsewhere.

Publication Date Each taxonomic list is established at a specific time. The date indicates this time.

IFAA Reference The IFAA signature serves as a hyperlink to the official IFAA website (<http://ifaa.net>).

Copyright Information The two links in this last line point to the copyright information available on the Creative Commons website (<https://creativecommons.org>).

12.7 Navigation

Figure 12.2 shows a complete example of 4-level navigation. This example uses the T4 list of the *en:viscerosensory nucleus*. In the navigation section, we can see the references to the top level, to levels 2 and 3, as well as to the current T4 level.


The organization into levels is as natural as possible, but the goal is to split the entire TAH at the top level into more than 900 detailed lists down to level T4, ideally sized to be displayed on one or two pages. This constraint can make the division somewhat arbitrary. Here is an overview of the four levels:

Higher Level T1: The higher level is a chapter of the TAH taxonomy that contains more than 14,000 items. Some chapters are particularly long and impractical to display. They can therefore be replaced by a short version, where the development of the taxonomy is interrupted each time a T2 level term is encountered. However, regardless of their size, complete chapters can also be displayed. The list of taxonomy chapters is 24 lines long.

Level T2: This level corresponds to the T2 level subchapters of each TAH chapter. There are 95 lists at this level. They are presented in two forms: a short list limited to terms up to the next level, T3, and an extended list containing all terms. This level is not mandatory.

Level T3: This level corresponds to the T3-level subdivisions of a T2-level list. There are 341 lists at this level for the TAH. They come in two forms: a short list limited to terms up to the next T3 level and an extended list containing all terms. This level is not necessarily present.

Current level: This level is a fictitious proposition, as no navigation is available. This level is necessarily one level lower than its previous level: it can be T2, T3, or T4. At this level, only the extended form of lists is found. There are 488 lists at this level for the TAH.

Taxonomic list T4, primary language: LA, subsidiary: EN, interface: EN, work in progress 

nucleus viscerosensorius

▼ LIST NAVIGATION

Home page [TA taxonomy](#)

Top level [complexus anatomicus !\[\]\(31708c81ca9ab6fd96aab314e71f4f1a_img.jpg\) Short Extended](#)

Level 2 [substantia grisea systematis nervosi centralis !\[\]\(d4146d342fc7c0755b0047dc54171972_img.jpg\) Short Extended](#)

Level 3 [nucleus trunci encephali !\[\]\(46c64b1c0714397a755bf4360cf656d9_img.jpg\) Short Extended](#)

Current level [nucleus viscerosensorius !\[\]\(da998c34442cbc22ce2a14dd995b6bd9_img.jpg\)](#)

Subsidiary language with Latin English [French](#) [Spanish](#) [Russian](#)

Non Latin primary language English [French](#) [Spanish](#) [Russian](#)

▼ ANCESTORS

Help on colors

- FMA:62955 [res anatomica !\[\]\(7edd317a6c9b0acb1839ec3dfdb372b4_img.jpg\)](#)
- FMA:61775 [res physica !\[\]\(1a8518eaaa95dd2a14a4bcd66bb67e0c_img.jpg\)](#)
- FMA:67165 [res corporea !\[\]\(5dd259868f5259ffd80ba5012136528a_img.jpg\)](#)
- FMA:305751 [structura anatomica !\[\]\(8605b7d28d25ed5b4cb70685f926fc69_img.jpg\)](#)
- FMA:67135 [structura anatomica postnatalis !\[\]\(ee595ec7b6e91afc71bcf1886407aba0_img.jpg\)](#)
- FMA:49443 [complexus anatomicus !\[\]\(32a3f8c3ed9153415accbfac6dc144f0_img.jpg\)](#)
- FMA:83115 [complexus partis principalis cellulae !\[\]\(290d5860bba28eee6831b7506ea01f63_img.jpg\)](#)
- FMA:83143 [complexus systematis nervosi centralis !\[\]\(4b4037e0c3e3e944ee95738b5c743b2b_img.jpg\)](#)
- FMA:67242 [substantia grisea systematis nervosi centralis !\[\]\(75d04e4d25092e6e1689bf47ecf0117a_img.jpg\)](#)
- FMA:223151 [substantia grisea subcorticalis !\[\]\(73a9be7211689f858575b6c9ef7f0ecd_img.jpg\)](#)
- FMA:83686 [nucleus !\[\]\(89bdd479fd79f515586c38aebf5c5909_img.jpg\)](#)
- FMA:83840 [nucleus encephali !\[\]\(578f359d9444cc0eaaa522a1500333c5_img.jpg\)](#)
- TAH11850 [nucleus trunci encephali !\[\]\(c47614a10de582aa6196970779f35072_img.jpg\)](#)
- TAH:E11791 [nucleus viscerosensorius !\[\]\(a72c6e1d9c0ab0444ca32b025c57d79c_img.jpg\)](#)

▼ TAXONOMIC LIST

















































FMAID	TA	UID	Pair	Short official Latin term	Short English equivalent
		11791		nucleus viscerosensorius 	viscerosensory nucleus 
		8354		nucleus viscerosensorius rhombencephali rostralis 	viscerosensory nucleus of rostral rhombencephalon 
		8355		nucleus ovalis ; rostrum nuclei solitarii 	oval nucleus ; rostral tip of solitary nucleus 
		8037		nucleus viscerosensorius rhombencephali caudalis 	viscerosensory nucleus of caudal rhombencephalon 
72607		5392		area postrema 	postrema area 
256691		5364		nucleus tractus solitarii ; nucleus solitarius 	nucleus of solitary tract ; solitary nucleus 
77467		5372		nucleus solitarius posterior ; nucleus solitarius dorsalis 	posterior solitary nucleus ; dorsal solitary nucleus 
77091		5365		nucleus parasolitarii 	parasolitary nucleus 
229579		5373		nucleus solitarius posterolateralis ; nucleus solitarius dorsolateralis 	posterolateral solitary nucleus ; dorsolateral solitary nucleus 
54597		5366		nucleus solitarius commissuralis 	commissural solitary nucleus 
77468		5374		nucleus solitarius anterior ; nucleus solitarius ventralis 	anterior solitary nucleus ; ventral solitary nucleus 

Figure 12.2: Structure of a taxonomic list in five sections, on EN: *viscerosensory nucleus*. This list gives exhaustively all the FR: *viscerosensory nuclei* that exist in the TAH.

Navigation from the list is always bidirectional: to a higher or lower level. Navigation to a higher level is performed in the Navigation section. The user simply selects a narrow or broad list from the suggestions, or the higher level.

Navigation to a lower level is performed within the list itself, in the left-hand column of terms, on an entity marked at level T2, T3, or T4, as applicable.

Selecting *initial page of the taxonomy* allows to exit list navigation and return to the starting page.

Switching between language selections is also offered in the Navigation section. This switch becomes permanent until another choice is made.

12.8 Log of updates

27 Aug 2025 Complete update of the file. From now on, the reference source for this document is the French version.

19 Mar 2022 Creation of the file.

12.9 Credentials

This document is part of the help system for the Terminologia Anatomica Humana website. It expresses the authors' views regarding its content and presentation. Although 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 content and presentation are welcome. An appropriate response will be provided if necessary.

Authentic URL of this file:

<https://ifaa.unifr.ch/Public/TNAEntryPage/help/HelpTaxList.pdf>