FMC rules and notations

Terms defined in the **Foundational Model of Connectivity (FMC)** fall into one of two categories: **standard terms (concepts)** and related terms (synonyms, partial correspondences, etc.).

The general form of a standard term in the FMC is as follows:

Standard term (abbreviation; reference for current name): Definition within FMC framework and using when helpful other *standard terms (Reference)*. Discovered by (reference). If discoverer and provider of current name are undetermined at this time, cite "see reference(s)" for especially helpful information, and provide discoverer and provider of current name when determined. Provision of no references at all implies that this version of the Thesaurus is the reference term's definition source; for later versions this version becomes the current term's source.

- Abbreviation of a standard term: The system for generating abbreviations has been described elsewhere (Swanson, 1992, p. 45) and most abbreviations are from (Alvarez-Bolado & Swanson, 1996; Swanson, 2004). The main features are that topographic divisions and gray matter regions are abbreviated with upper case letters, their subdivisions are indicated in lower case following the main abbreviation (e.g., MPNm refers to the medial part of the medial preoptic nucleus), and white matter tracts are indicated by lower case letters alone
- Reference for current name. This is provided to the best of our current knowledge and is subject to future correction. If the origin is unknown, it was probably after 1840, and no date is used until proper documentation is obtained. For greatest clarity in text this format is recommended: *standard term (Jones, 1928)*, synonym (Smith, 1942). The surname in this format is not an eponym (Barker, 1907, p. 7), it is an attribution of priority.
- **Definition of a standard term** is framed within the overall FMC scheme, and thus is internally consistent with the definitions of all other terms.

Synonyms in FMC. The semantic relationship between standard term and synonym is identical definition, and for relevant FMC terms implies identical connections. Synonyms may have been created before or after the current name for a concept-standard term.

Notations and rules in the online version of FMC

In the online version of FMC (http://brancusi1.usc.edu/thesaurus) the encoding is as follows:

- Bold term (e.g. **Central nervous system**) is a standard term in FMC.
- Normal font term (e.g. Cerebral ganglion) is a synonym, partial correspondent, etc. of a standard term.
- The abbreviation of a standard term is in italics.
- The reference for a standard term is in blue italics, and is associated with a link toward the details of the reference.
- Example: <u>Cerebral cortex</u> (*CTX* ; <u>Bauhin</u>, <u>1605</u>)

The standard terms used in the definition of another **standard term** (e.g. **Cerebral cortex**) are in yellow and include the term and its reference if known. Each of them is associated with a link that returns its specific page.

Example of standard term used in the definition of the Cerebral cortex: dorsal (Barclay, 1803)

References used in the part of concept definitions, "see references," are labeled with the same color, and their associated links retrieve specific details: authors, reference title, year of publication, PubMED link when applicable, and the number of standard terms that use it as the principal reference.

The unique page of each standard term (e.g. http://brancusi1.usc.edu/thesaurus/definition/cerebral-cortex/) includes the definition of the term, the list of synonyms, and a comment form that can be used by registered users for critiques and suggestions. Each comment approved by the system administrators will be posted in a list below the comment form, and it will be used to improve and extend FMC. The source (i.e. the names of the registered users) of any improvement or extension of FMC will be preserved in the online version of FMC.