

File S1: Glossary for cnida terminology and for specific cnida structures, with associated literature.

1. *Acontiid* (pl. *acontioids*) (Pax, 1914) = *muco-craspedoneme* (Carlgren, 1912), *acontium-like thread* (Carlgren, 1912), *acontium* (van Beneden, 1897; Bourne, 1919). Short, elongated thread-like structures at the aboral end of mesenterial filaments, containing cnidocysts and mucus cells in large numbers.
2. *A-isorhiza* (pl. *A-isorhizas*) (Calder, 1974; Östman & Hydman, 1997). Large nematocysts with isodiametric tubule and broad, oval capsule with closely packed irregular coiled tubule. Tubule with weak spines. Entangling function.
3. *a-isorhiza* (pl. *a-isorhizas*) (Calder, 1974; Östman & Hydman, 1997). Small nematocysts with isodiametric tubule and elongate, oval capsule with horizontally coiled tubule. Spined, penetrant tubule.
4. *Amastigophore* (pl. *amastigophores*) (Weill, 1934). Nematocysts with a well-defined isodiametric shaft with prominent spines, no distal (terminal) tubule. Penetrant.
5. *Atrich/atrachous* (pl. *atrachs*) (Weill, 1934; Mariscal, 1974). Isorhiza without well-developed spines on isodiametric tubule.
6. *b-mastigophore* (pl. *b-mastigophores*) (Carlgren, 1940) = *b-rhabdoid* (Schmidt, 1969). Nematocysts with well-defined isodiametric shaft with prominent spines, tapered transition between shaft and tubule without v-shaped notch. Penetrant.
7. *Botrucnid* (pl. *Botrucnids*) (van Beneden, 1897). An aggregation or cluster of cnidocytes, grape-like structures, present on mesenteries in Botrucnidiferidae, containing cnidocysts and mucus cells.
8. *b-rhabdoid* (pl. *b-rhabdoids*) (Schmidt, 1969). See *b-mastigophore*.
9. *Birophaloid type 1* (pl. *birophaloids type I*) (Mariscal, 1974; Östman, 2000). Nematocysts with shaft of unequal diameter. Distal and proximal dilatations separated. Penetrant.
10. *Birophaloid type II* (pl. *birophaloids type I*) (Östman & Hydman, 1997). Nematocysts with shaft of unequal diameter. Distal and proximal dilation close together. Penetrant.
11. *Capsule* (pl. *capsules*) (Weill, 1934). Membrane enclosing eversible tubule and shaft.
12. *Cnida* (pl. *cnidae*) (Gosse, 1858) / *cnidocyst* (Weill, 1934). Everting cnidarian organelles including nematocysts, spirocysts and ptychocysts.

13. *Cnidocyst* (pl. *cnidocysts*) (Slautterback & Fawcett, 1959). Membrane-enclosed cellular organelles, consisting of capsule and eversible tubule, including nematocysts, spirocysts and ptychocysts.
14. *Cnidom/cnidome* (pl. *cnidoms/cnidomes*) (Weill, 1926). Group of cnidae (including nematocyst, spirocyst and ptychocyst) present in a cnidarian specimen.
15. *Cnidorage* (pl. *cnidorages*) (van Beneden, 1897). A globular or grape-like structure of ectodermal (Carlgren, 1912) and mesogloal origin attached to the mesentery. Cnidorages contain supporting cells, several large nematocysts, spirocysts and mucus cells.
16. *Cnidoglandular tract* (Hertwig and Hertwig, 1879; Carlgren, 1949). Continuation of ciliated ectoderm from a ridge of the actinopharynx along the length of a mesenterial filament.
17. *Craspedoneme* (pl. *craspedonemes*) (McMurrich, 1910) = *mesenterial faden* (Hertwig & Hertwig, 1879); *fil. mésentériques* (van Beneden, 1897). Branched or unbranched, flattened, thread-like structures, abundantly attached along mesenteries as bunches or single, containing cnidae and mucus cells.
18. *Desmoneme* (pl. *desmonemes*) (Mariscal, 1974). Nematocyst with inverted tubule forming a corkscrew-like coil. Entangling function.
19. *Eurytele* (pl. *euryteles*) (Mariscal, 1974). Nematocysts with shaft dilated distally, spines on shaft of same or unequal size. Penetrant.
20. *Faltstück* (Schmidt, 1969). Inverted proximal shaft-part tight, helically folded, revealing spineless shaft or loosely set, small spines when discharged, in some p-rhabdoids, mastigophore and amastigophore nematocysts.
21. *Endothelium* (pl. *endothelia*) (Brusca *et al.* 2016). A layer of squamous endothelial cells lining the interior surface of organisms.
22. *Gastrodermis* (Brusca *et al.* 2016). Inner layer of cells in lining membranes of *cnidarian* gastrovascular cavity.
23. *Haploneme* (pl. *haplonemes*) (Weill, 1934; Mariscal, 1974). Nematocyst tubule without a well-defined shaft. Spine size equal or gradual on basal tubule.
24. *Hauptstück* (Schmidt, 1969). Less densely twisted main shaft in rhabdoids, mastigophore and amastigophore nematocysts, revealing densely set, large spines when discharged.
25. *Heteroneme* (pl. *heteronemes*) (Weill, 1934; Mariscal, 1974). Tubule with a well-defined shaft.

26. *Holotrich/holotrichous* (pl. *holotrichs*) (Schmidt, 1969; Mariscal, 1974). Isorhiza with well-developed spines along isodiametric tubule.
27. *Homotrich/homotrichous* (pl. *homotrichs*) (Weill, 1934). Isorhiza with spines of equal size along isodiametric tubule.
28. *Isorhiza* (pl. *isorhizas*) (Weill, 1934). Nematocyst with isodiametric tubule, open at tip, equal to *homotrich* (Weill, 1934) and *holotrich* (Schmidt, 1969).
29. *Macrobasic mastigophore* (Weill, 1934). Mastigophore with discharged shaft more than four times capsule length, with terminal/distal tubule. Penetrant.
30. *Mastigophore* (pl. *mastigophores*) (Weill, 1934). Nematocyst with a well-defined isodiametric shaft with prominent spines and terminal/distal tubule. Penetrant.
31. *Mesenterial filament* (Frey & Leuckart, 1847; Hertwig & Hertwig, 1879). Thickened rim running along free border of mesentery from end of the actinopharynx.
32. *Mesobasic mastigophore* (Weill, 1934; Östman, 2000). Mastigophore with discharged shaft at least one and a half times capsule length, but shorter than four times capsule length, terminal/distal tubule. Penetrant.
33. *Microbasic amastigophore* (Weill, 1934; Östman, 2000). Amastigophore with discharged shaft less than one and a half times capsule length, without terminal/distal tubule. Penetrant.
34. *Microbasic mastigophore* (Weill, 1934; Östman, 2000). Mastigophore with discharged shaft less than one and a half times capsule length, with terminal/distal tubule. Penetrant.
35. *Microfibrill* (pl. *microfibrillae*) (Brusca *et al.* 2016). Very fine fibrils, consisting of glycoproteins, visible only under an electron microscope, and typically aggregated into coarser structures.
36. *Microtubule* (pl. *microtubuli*) (Brusca *et al.* 2016). Polymers of tubulin, forming parts of cytoskeleton, and internal structures of cilia and flagella.
37. *Nematocyst* (pl. *nematocysts*) (Weill, 1934; Mariscal, 1974). Organelle characterized by a capsule containing a coiled or folded tubule with or without spines.
38. *O-isorhiza* (pl. *O-isorhizas*) (Östman & Hydman, 1997). Nematocysts with subspherical capsule and irregularly, loosely coiled tubule. Tubule isodiametric, spined. Penetrant.
39. *Operculum* (pl. *opercula*) (Mariscal, 1974). Lid that opens the nematocyst capsule of meduzoans.

40. *p-mastigophore* (pl. *p-mastigophores*) (Carlgren, 1940, 1949) = *p-rhabdoid* (Schmidt, 1969). Nematocyst with a well-defined isodiametric shaft with prominent spines, a v-notch at shaft end, and terminal/distal tubule. Penetrant.
41. *p-rhabdoid* (pl. *p-rhabdoids*) (Schmidt, 1969). See *p-mastigophore*.
42. *Penicillus* (pl. *penicilli*) (Stephenson, 1928; den Hartog, 1977). Organelle characterized by a shallow v-shaped notch undischarged shaft end and a very short terminal tubule. Not quite identical to *p-rhabdoids* of Schmidt (1969).
43. *Ptychocyst* (pl. *ptychocysts*) (Mariscal *et al.* 1977a) = *atrich* (Carlgren, 1940; den Hartog, 1977). Tubule with dense, slightly oblique folds aligned to longitudinal capsule-axis, lacks spines, involved in tube formation of Ceriantharia.
44. *Spirocyte* (pl. *spirocytes*) (Weill, 1934; Mariscal *et al.* 1977b). Thin-walled capsule with spirally coiled tubule of uniform diameter. Tubule lacks spines, secretes unique fine and adhesive microfibrillae.
45. *Spirula* (pl. *spirulae*) (Stephenson, 1928; den Hartog, 1977) closely equivalent to *b-rhabdoid* (Schmidt, 1969) and *b-mastigophores* (Carlgren, 1940). Nematocyst with well-defined shaft with prominent spines, tapered transition between shaft and tubule without v-shaped notch. Penetrant.
46. *Stenotele* (pl. *stenoteles*) (Mariscal, 1974). Nematocyst with shaft dilated at base, three spines on shaft especially strongly developed. Penetrant.
47. *Tubule* (pl. *tubules*) (Weill, 1934). Eversible hollow structure coiled or folded (Mariscal *et al.* 1977b) within capsule of cnidae.
48. *v-notch* (Carlgren, 1940; Schmidt, 1969). A distal funnel-shaped opening at inverted shaft end in *p-mastigophores*/*p-amastigophores* and *p-rhabdoids*.

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