

Hub

In the context of a [network](#), a hub is a node with a large degree, meaning it has [connections](#) with many other [nodes](#).

Brain networks or '[connectomes](#)' include a minority of highly connected hub [nodes](#) that are functionally valuable, because their topological centrality supports integrative processing and adaptive behaviours. Recent studies also suggest that hubs have higher metabolic demands and longer-distance connections than other brain regions, and therefore could be considered biologically costly ¹⁾

¹⁾

Crossley NA, Mechelli A, Scott J, Carletti F, Fox PT, McGuire P, Bullmore ET. The hubs of the human connectome are generally implicated in the anatomy of brain disorders. *Brain*. 2014 Aug;137(Pt 8):2382-95. doi: 10.1093/brain/awu132. Epub 2014 Jun 19. Erratum in: *Brain*. 2015 Aug;138(Pt 8):e374. PMID: 25057133; PMCID: PMC4107735.

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