

The [frontal aslant tract](#) (FAT) is a major connection between the [pre-supplementary motor area](#) (pre-SMA) and [Broca's area](#), whose functional role remains undefined.

Patients with lesions of the [pre-supplementary motor area](#) present with various degrees of speech impairment from a total inability to initiate speech (i.e. [mutism](#)) to mild altered fluency.

Findings suggest that these medial regions of the frontal lobe could facilitate speech initiation through direct connection to the pars opercularis of the inferior frontal gyrus. Indirect support of this interpretation comes from the frequent observation of impaired fluency in patients with deep lesions in the frontal periventricular white matter. In these cases, a disconnection of the [frontal aslant tract](#) could explain the emergence of symptoms usually associated with frontal cortical damage.

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Last update: **2024/06/07 02:58**

