

Trigeminal Motor Nucleus

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Table of contents

1 Anatomy	1
2 Function	1
2.1 Bite modulation	1

1 Anatomy

- “The motor nucleus is medial to the principal sensory nucleus”²
- “Fibers from this nucleus exit from the brain stem medial to the entering sensory root, pass underneath the trigeminal ganglion without synapse, and become incorporated in the mandibular division”²

2 Function

2.1 Bite modulation

“Axons from the mesencephalic nucleus project to the motor nucleus, completing a reflex arc in modulating the degree of bite”²

1. Blumenfeld H. *Neuroanatomy Through Clinical Cases*. 3rd ed. Oxford university press; 2022.
2. Joo W, Yoshioka F, Funaki T, Mizokami K, Rhoton AL. Microsurgical anatomy of the trigeminal nerve. *Clinical Anatomy*. 2014;27(1):61-88. doi:[10.1002/ca.22330](https://doi.org/10.1002/ca.22330)

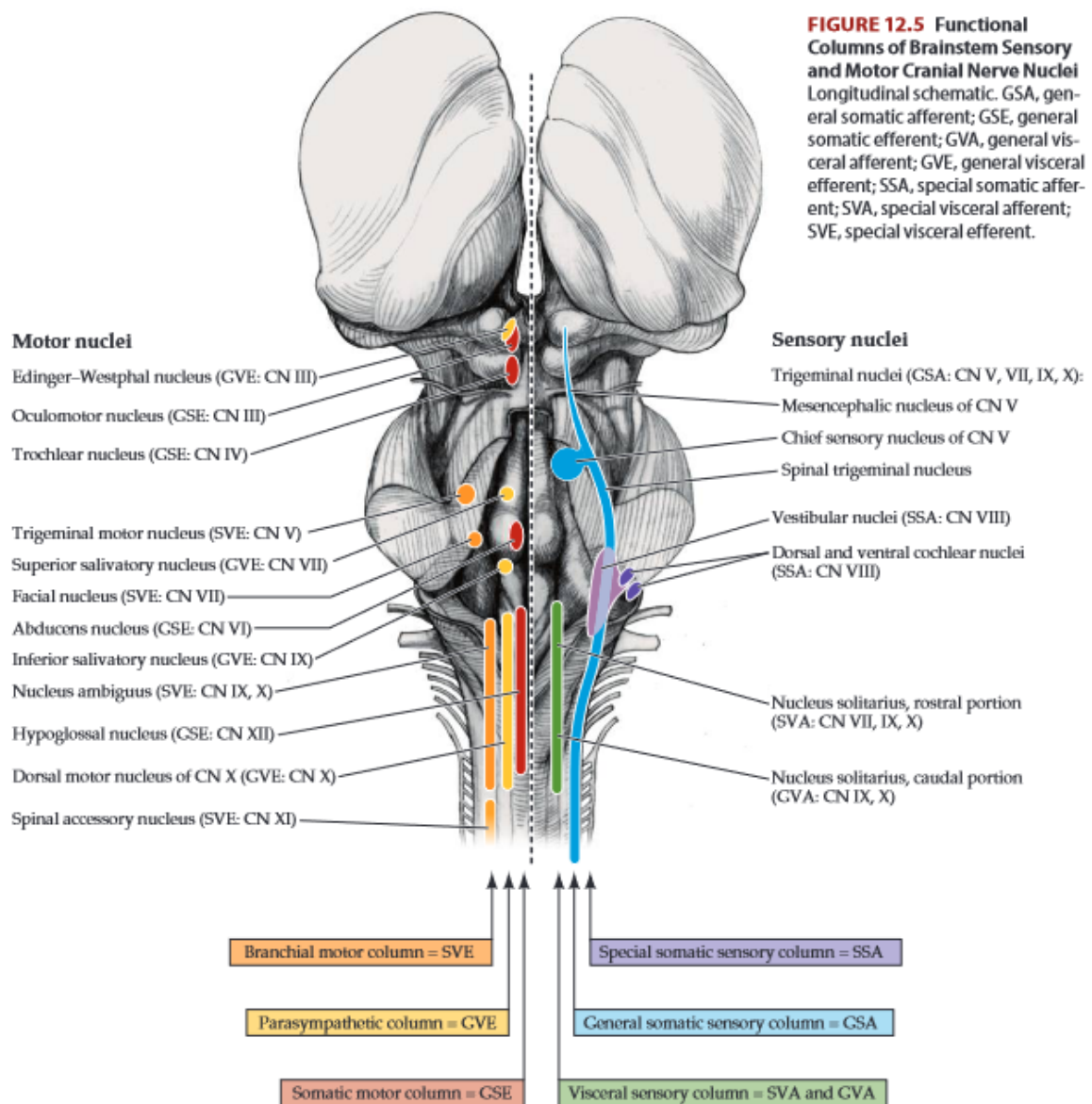


Figure 1: Functional columns of brainstem sensory and motor cranial nerve nuclei (from Blumenfeld Figure 12.5¹)