

THE TWELVE CRANIAL NERVES:

Oh, oh, oh, to touch and feel very good velvet, ah

I OLFACTORY (Sensory)

Function: Special Sensory (Smell)

Cranial Foramina: Cribriform plate

II OPTIC (Sensory)

Function: Special Sensory (Vision)

Cranial Foramina: Optic canal

III OCULOMOTOR (Motor)

Function: somatic motor to move 4 of the eye muscles; parasympathetic motor neurons to constrict pupil and bend lens (parasympathetic to ciliary body does both of these things)

Cranial Foramina: Superior orbital fissure

IV TROCHLEAR (Motor)

Function: somatic motor neurons to move superior oblique eye muscle

Cranial Foramina: superior orbital fissure

V TRIGEMINAL (Both)

Function:

V1 (ophthalmic) —sensory from skin of upper face and cornea

V2 (maxillary)—sensory from skin of cheek and upper teeth

V3 (mandibular)—sensory from skin of mandible and lower teeth; somatic motor neurons to mastication muscles

Cranial foramina:

V1 (ophthalmic) —superior orbital fissure; V2 (maxillary) and V3 have different passageways

VI ABDUCENS (Motor)

Function: somatic motor neurons to move lateral rectus eye muscle

Cranial foramina: superior orbital fissure

VII FACIAL (Both)

Bell's Palsy is when CN7 becomes inflamed

Function: Special sensory (taste), somatic motor to muscles of facial expression, parasympathetic motor to lacrimal gland and salivary glands

VIII VESTIBULOCOCHLEAR (Sensory)

Function: Special Sensory: hearing (cochlea), balance (semicircular canals and vestibule)

IX GLOSSOPHARYNGEAL (Both)

Function: somatic motor to muscles for swallowing, special sensory (taste)

Cranial foramina: jugular foramen

X VAGUS (Both)

Function: sensory from viscera; somatic motor to many throat muscles; parasympathetic motor to viscera

Cranial foramina: jugular foramen

XI ACCESSORY (Motor)

Function: somatic motor neurons trapezius and SCM; also some somatic motor to throat muscles

Cranial foramina: jugular foramen

XII HYPOGLOSSAL (Motor)

Function: Somatic motor neurons to Tongue muscles