

Lab 25 Dissection Steps:

- On the RIGHT half of the head reflect the parotid salivary gland. Dissect deep between the parotid and the sublingual glands (at the base of the ear) to expose the facial nerve. Identify the **facial nerve (cranial nerve VII)**. Dissect the following branches of the facial nerve:
 - caudal auricular branches***
 - ventral buccal n.**
 - dorsal buccal n.**
 - auriculopalpebral n.**
 - rostral auricular branches**
 - palpebral branches**

- In the dissection field of the facial nerve branches, attempt to identify the ***auriculotemporal n.***, which is a branch of the mandibular nerve. The auriculotemporal n. is found deep to the origin of the auriculopalpebral n. and can be difficult to see.

- Identify the **thyroid gland**
 - Attempt to identify ***external & internal parathyroid glands***

- Identify the **esophagus**
 - Re-identify the ***pharyngoesophageal limen*** (boundary between laryngopharynx and esophagus, previously identified in Lab 22)

- Identify the **trachea**
 - Identify the **tracheal cartilages**

- Re-identify the **medial retropharyngeal lymph node** (previously identified in Lab 9)

- Identify the (right) **common carotid artery**. Identify the following branches of the common carotid a.:
 - Attempt to identify the ***cranial thyroid a.***
 - internal carotid a.** (in the cat this may be absent/partially absent)
 - Identify the **carotid sinus** at the origin of the internal carotid a.
 - external carotid a.**

- On the LEFT half of the head (or whichever half has the zygomatic arch removed) re-trace the common carotid a. and re-identify the internal and external carotid arteries. Continue to follow the external carotid artery and identify the following branches. (Transect or remove parts of the digastricus m. if necessary to observe some of the vessels.):
 - occipital a.**

- Attempt to identify the **cranial laryngeal a.** (if intact)
 - lingual a.**
 - facial a.**
 - Identify the **sublingual a.** as a branch off of the facial a.
 - Attempt to identify the **caudal auricular a.** by reflecting the caudal portion of the parotid salivary gland
 - Attempt to identify the **superficial temporal a.** (this is often cut as a result of removing the temporalis m.)
 - maxillary a.** (the larger terminal branch of external carotid after the superficial temporal a. is given off)
- Rotate the mandible outward by forcing the coronoid process of the mandible laterally to loosen the temporomandibular joint. This will enable you to see/follow the maxillary artery and nerve, and also the mandibular nerve.
- Identify the **mandibular n. (branch of trigeminal nerve (V))** and the following branches:
- lingual n.**
 - inferior alveolar n.**
 - mylohyoid n.**
 - Attempt to identify the **buccal n.** (often broken)
 - Re-identify the **auriculotemporal n.** branch of the mandibular (this was identified on the lateral side in the dissection field with the facial nerve branches)
- Follow the maxillary artery and identify the following branches:
- inferior alveolar a.**
 - Attempt to identify the **caudal deep temporal a.**
 - external ophthalmic a.**
 - Attempt to identify the **palatine aa.**
 - infraorbital a.**
- Identify the **maxillary n. (branch of trigeminal nerve (V))** and dissect the continuation of the maxillary n., the **infraorbital n.**, as it exits the infraorbital foramen below the eye
- Identify the vagosympathetic trunk and trace it to the head. Transect muscles as needed to trace the vagosympathetic to the point where it emerges from the skull.
- Identify the **cervical sympathetic trunk** and the **cranial cervical ganglion**
- Identify the **vagus nerve (cranial nerve X)** and attempt to identify the **cranial laryngeal** and **caudal (recurrent) laryngeal nerves** leaving the vagus
- Identify the **hypoglossal nerve (cranial nerve XII)** (associated with the lingual artery)