

## Unit 16: Topographic anatomy: **Face and scalp**

### Guide for the practical class using Anatomedia online

#### Topography of face and scalp:

1. Go to An@tomedica, **head** module-regions-frame: **01** (Surface markings of head)
  - Activate 'lm' to show surface margins between regions
  - Activate 'can you identify' with 'lm' turned on to show margin around the head, *palpate these on your own head, in front of the mirror*
2. Go to An@tomedica, **head** module-dissection-frames: **01-03** (Surface margins & markings, Skin incisions, Skin removed)
  - Activate 'lm' to show surface margins between head regions
  - Click on underlined text to see:
    - surface markings
    - skin incisions*palpate these on your own head, in front of the mirror*
3. Go to An@tomedica, **head** module-regions-frame: **05** (Regions of head)
  - Click on underlined text to locate and distinguish cranial, facial and upper airway regions of the head
  - Activate 'can you identify' to distinguish superficial from deep regions
4. Go to An@tomedica, **head** module-regions-frame: **07** (Scalp)
  - Click on underlined text to see:
    - layers of the SCALP and their significance
    - supply of SCALP
    - peculiarities and clinical relevance of SCALP layers
  - Activate 'can you identify' to distinguish individual SCALP structures/layers, particularly the neuro-vascular supply of the scalp

#### Muscles of facial expression and their supply:

5. Go to An@tomedica, **head** module-systems-frame: **29** (Muscles of facial expression)
  - Click on underlined text to list and distinguish muscles of facial expression belonging to different groups
  - Activate 'can you identify' to visualize different muscle groups but press red 'm' button to highlight muscles

6. Go to An@tomedica, **head** module-dissection-frame: **05** and **07** (Buccal SMAS excised, Motor & sensory nerves traced)  
-Activate 'can you identify' to visualize different muscle groups, blood vessels and nerves, pressing different colored buttons will highlight different structures (bones, muscles, nerves, arteries, veins, viscera)  
*Try to activate your own facial muscles and achieve different facial expression, in front of the mirror*
7. Go to An@tomedica, **head** module-dissection-frame: **11** (Subcutaneous fat removed)  
-Activate 'can you identify' to visualize different muscle groups, press red 'm' button to highlight muscles  
*Try to activate your own facial muscles and achieve different facial expression, in front of the mirror*
8. Go to An@tomedica, **head** module-dissection-frame: **13** (Parotid gland and platysma excised)  
-Activate 'can you identify' to visualize branches of facial nerve/artery/vein supplying face (including muscles of facial expression), press red 'a', blue 'v' and yellow 'n' buttons to highlight appropriate structures
9. Go to An@tomedica, **head** module-regions-frame: **20** (Parotid region)  
-Activate 'can you identify' to visualize branches of facial nerve/artery/vein supplying face (including muscles of facial expression), press red 'a', blue 'v' and yellow 'n' buttons to highlight appropriate structures
10. Go to An@tomedica, **head** module-systems-frame: **63** (Cranial nerve VII)  
-Click on underlined text to review anatomy of facial nerve, particularly important are extracranial branches of CN VII  
-Activate 'can you identify' to visualize branches of facial nerve, particularly its extracranial branches

### **Cutaneous nerves and blood vessels of face and scalp:**

11. Go to An@tomedica, **head** module-regions-frame: **19** (Face)  
-Click on underlined text to view cutaneous nerve branches on the face and visualize their 'exit points'  
-Click on underlined text to view arteries and veins on the face and visualize their anastomoses

- Activate 'can you identify' to visualize branches of trigeminal nerve (ophthalmic, maxillary and mandibular branches) and their bony foramina
- Activate 'can you identify' to visualize branches of facial artery and tributaries of facial vein

12. Go to An@tomedica, **head** module-systems-frame: **62** (Cranial nerve V)

- Click on underlined text to review anatomy of trigeminal nerve (Va, Vb, Vc), particularly main cutaneous branches of ophthalmic, maxillary and mandibular nerves
- Activate 'can you identify' to visualize individual branches of trigeminal nerve and their bony foramina/communications

13. Go to An@tomedica, **head** module-systems-frame: **68** (External carotid artery)

- Click on underlined text to visualize branches of external carotid artery, particularly of the facial, superficial temporal and occipital arteries
- Activate 'can you identify' to visualize the above arterial branches

14. Go to An@tomedica, **head** module-systems-frame: **71** (Extracranial & diploic veins)

- Click on underlined text to visualize superficial and deep extracranial veins and their tributaries
- Activate 'can you identify' to visualize the above veins and their tributaries