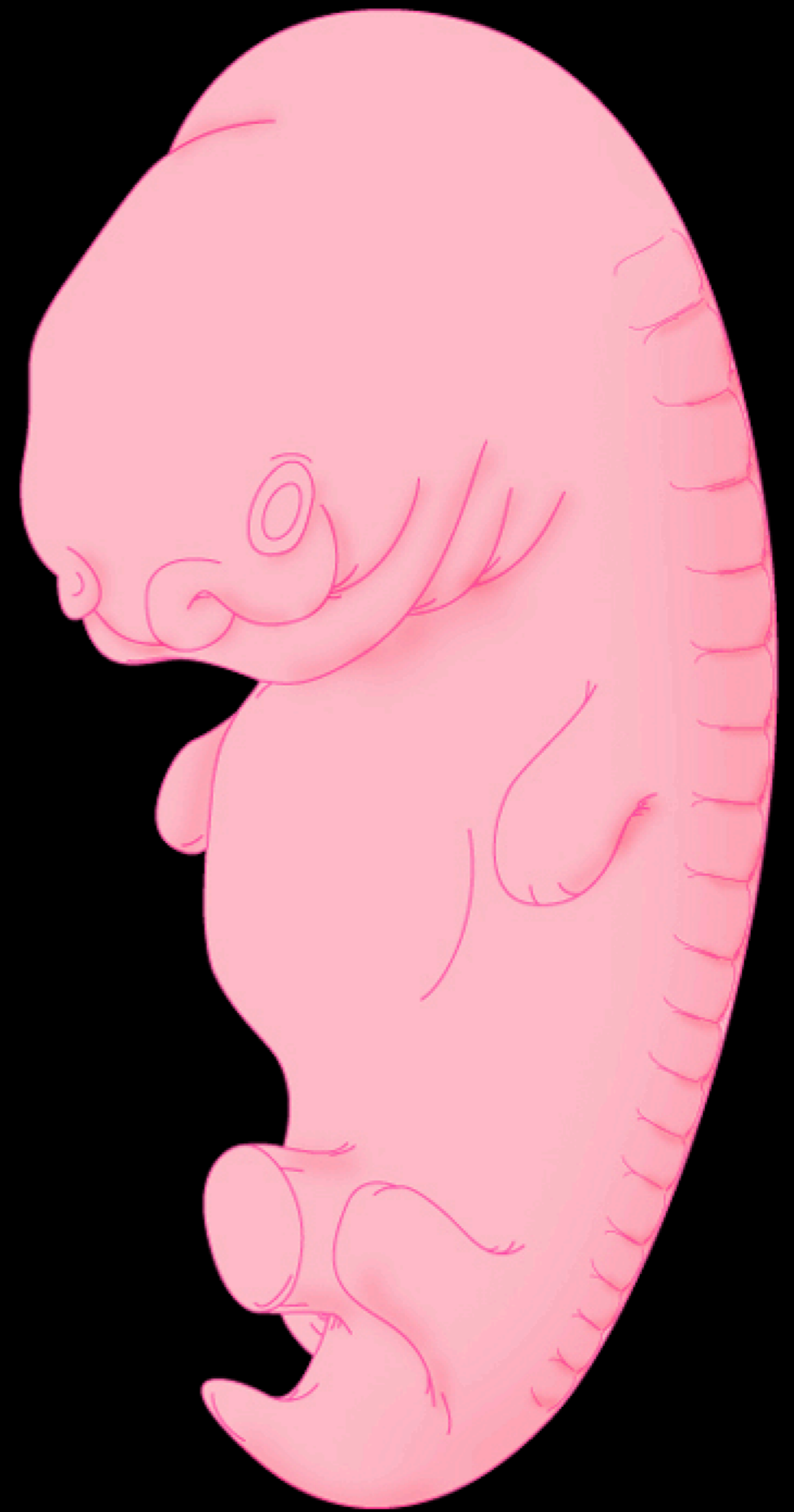


# Head and Neck



# Head and Neck

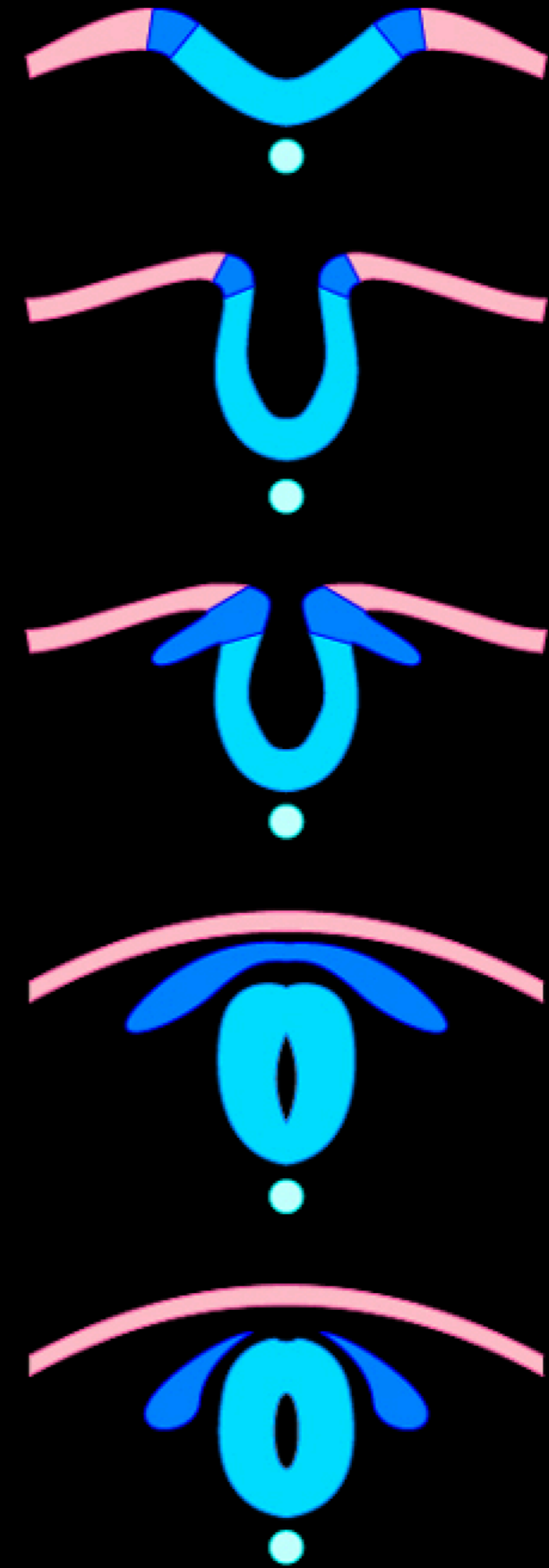
Patterns of Organization in the Head

## Theme One

Formation of neural tube

Neural tube

Neural crest

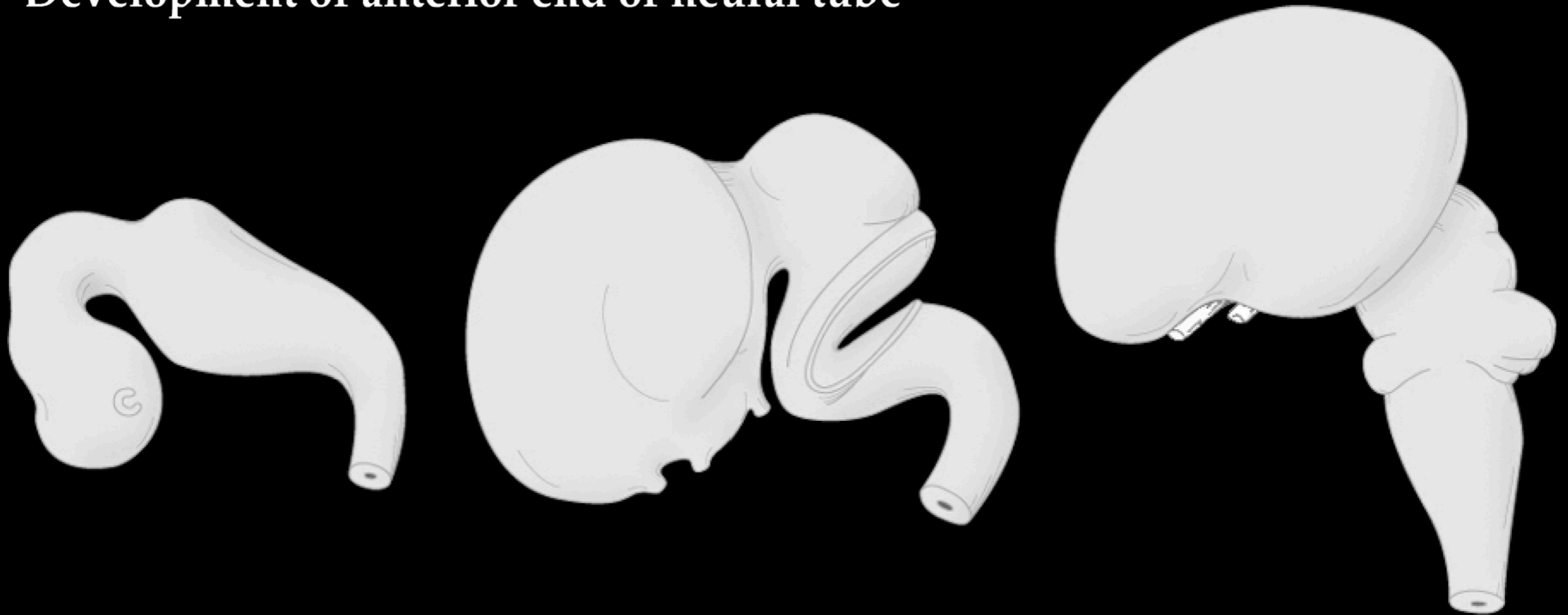


# Head and Neck

Patterns of Organization in the Head

## Theme One

Development of anterior end of neural tube

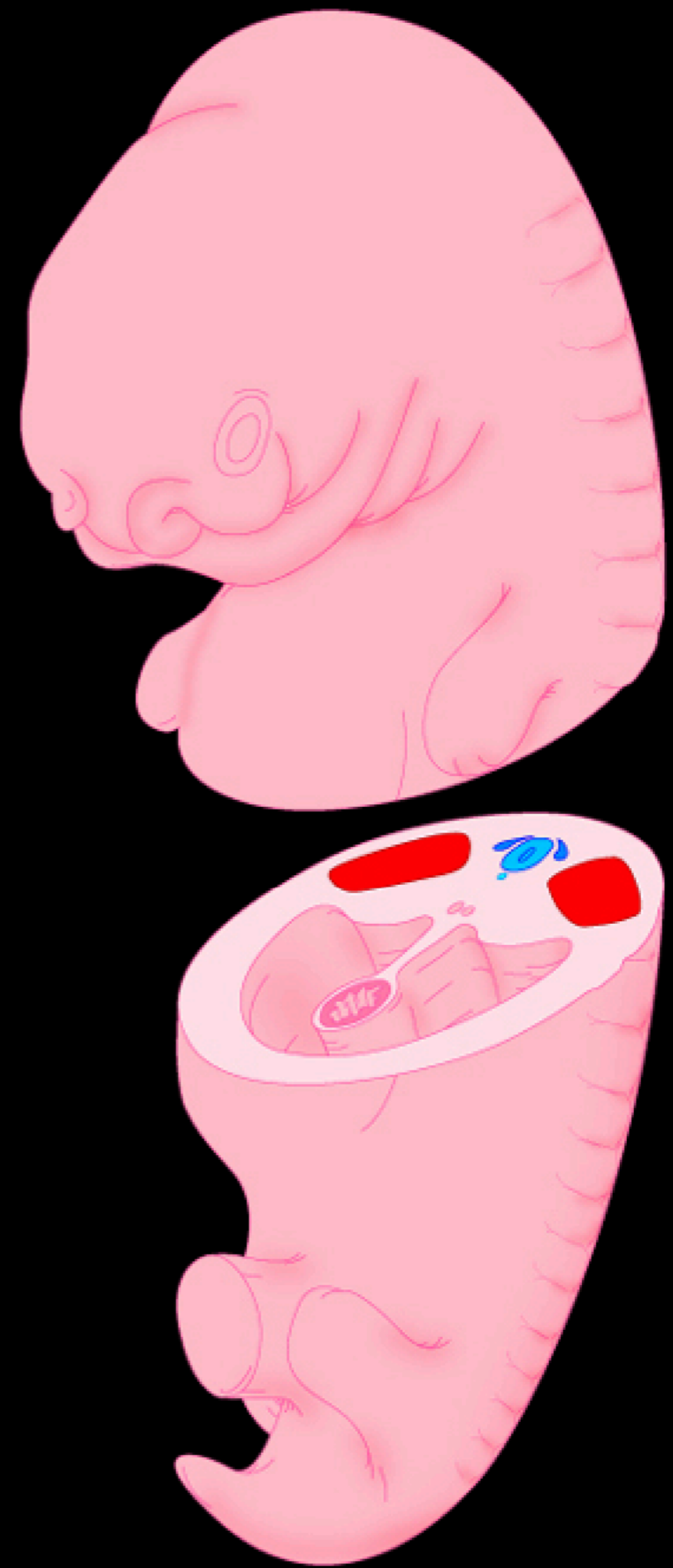


# Head and Neck

Patterns of Organization in the Head

## Theme Two

Review of the somite

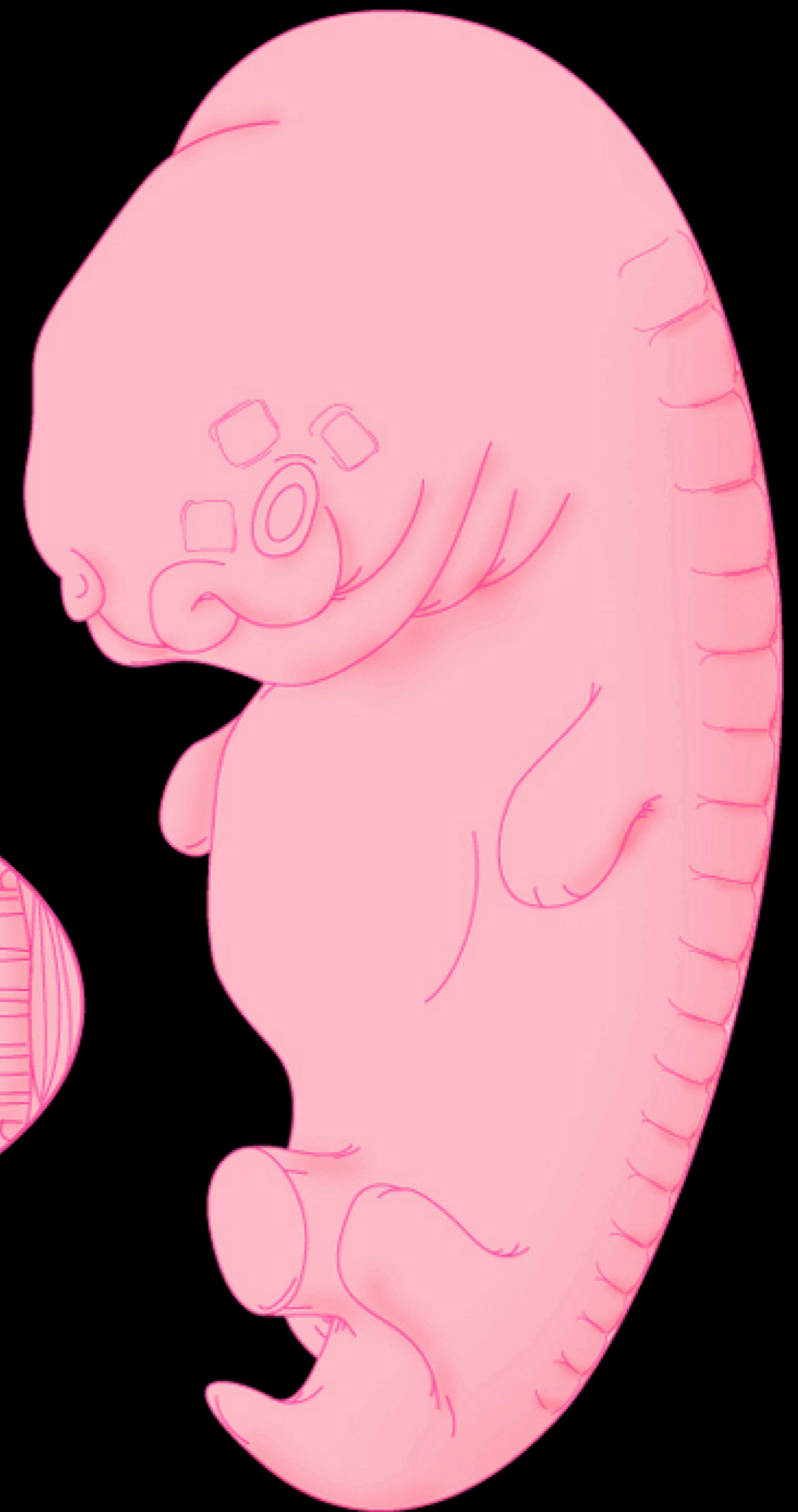
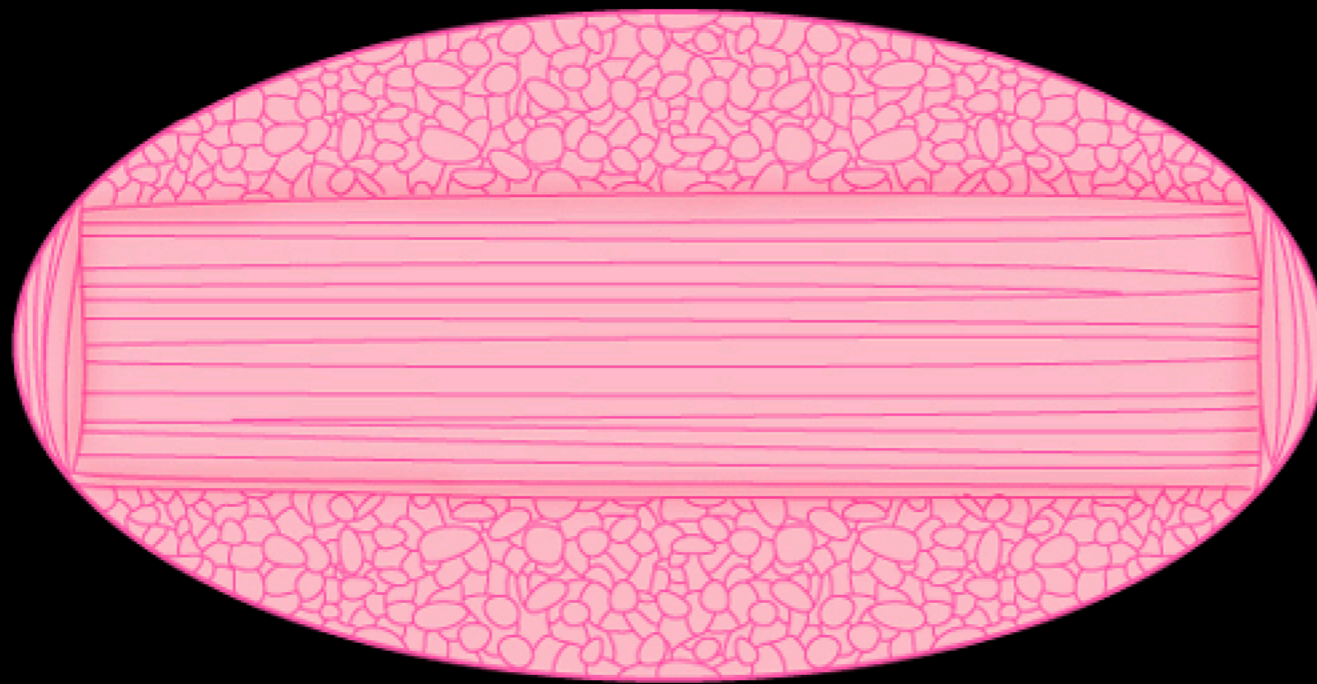


# Head and Neck

Patterns of Organization in the Head

## Theme Two

Occipital somites  
Tongue muscles



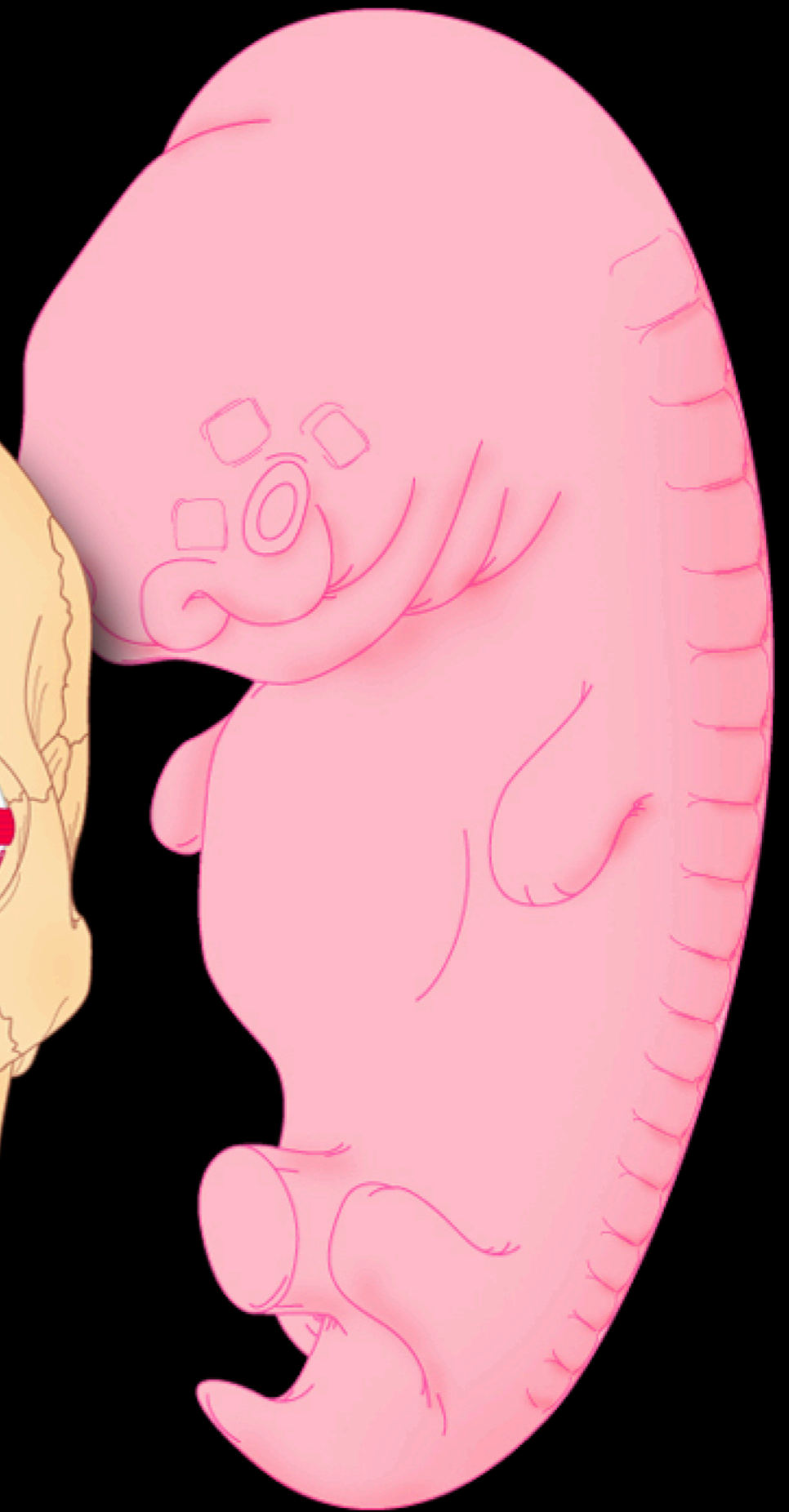
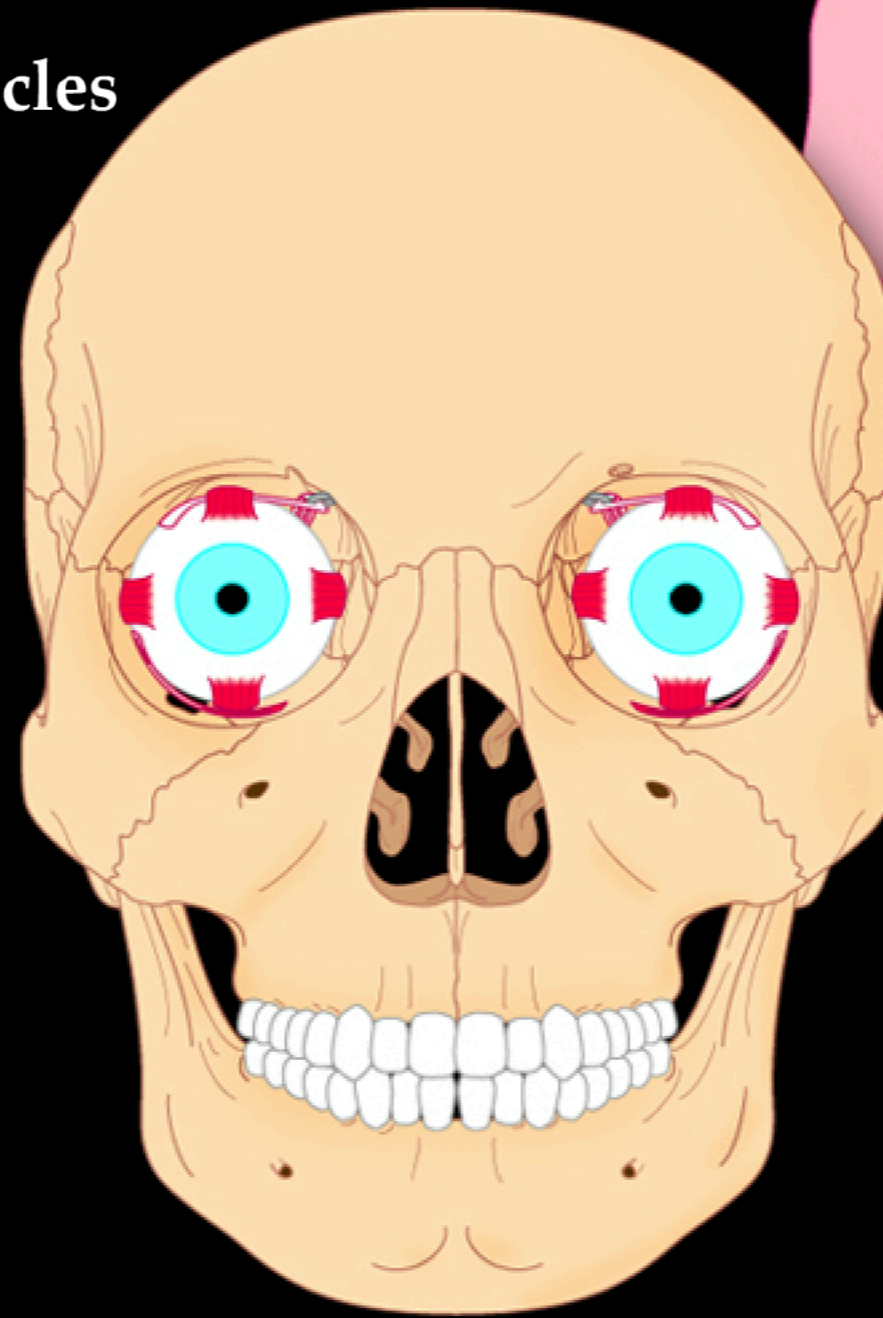
# Head and Neck

Patterns of Organization in the Head

## Theme Two

Pre-otic somites

Extrinsic eye muscles

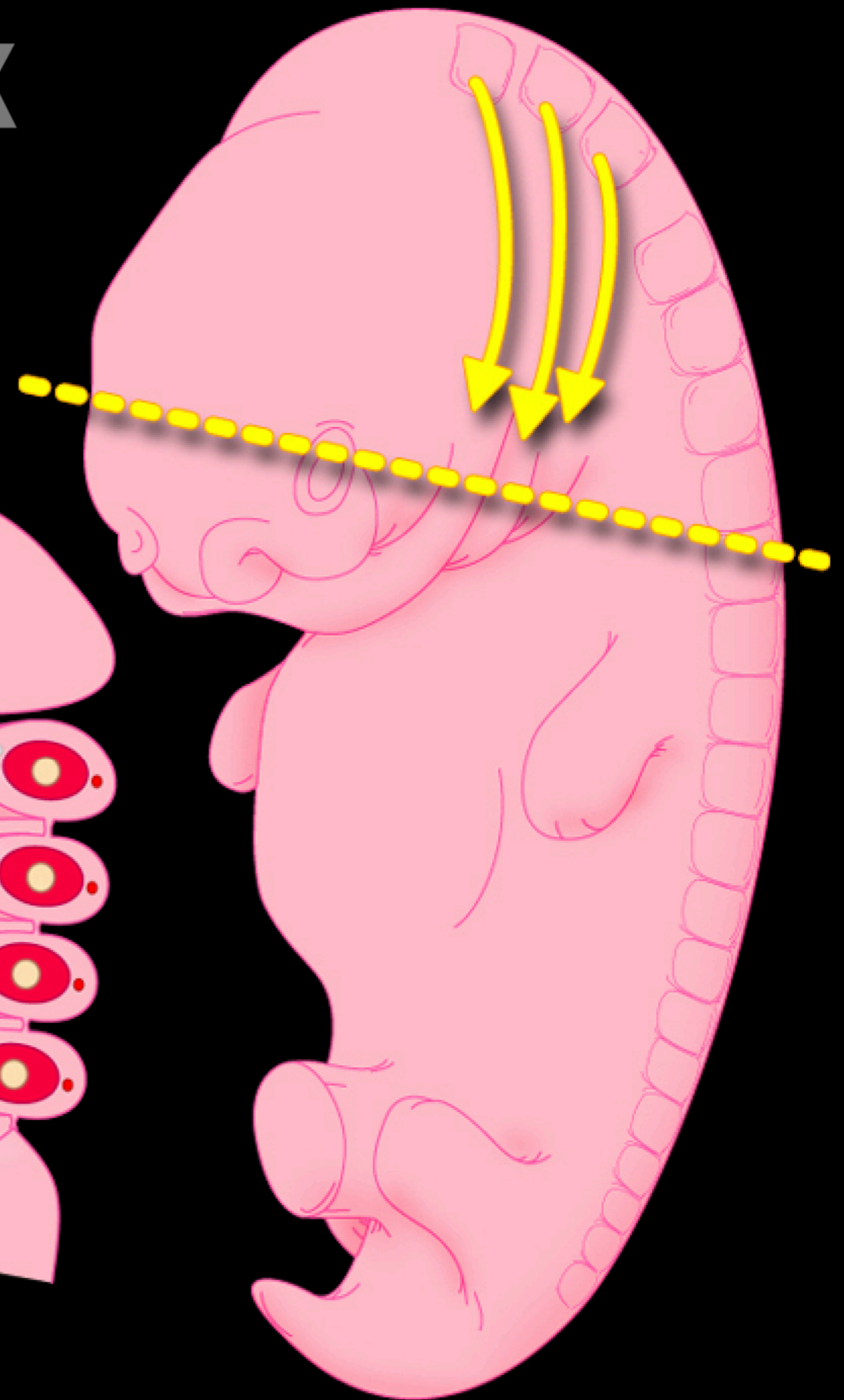
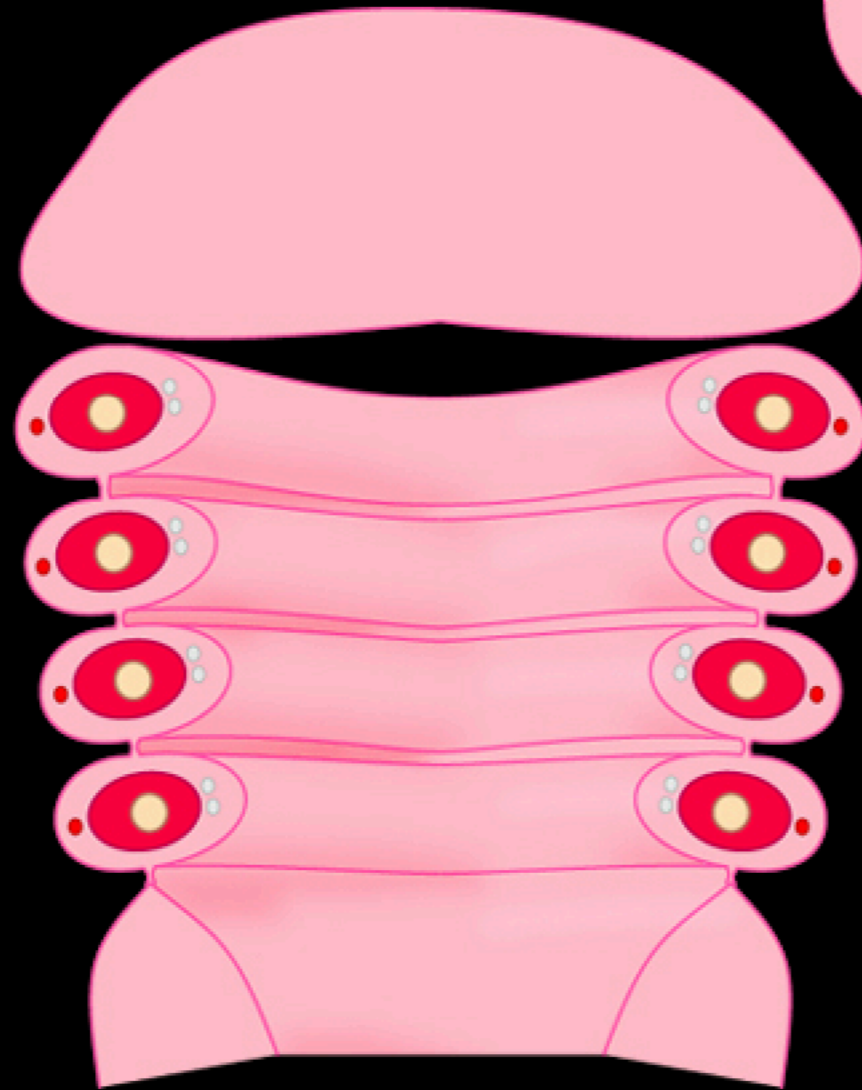


# Head and Neck

Patterns of Organization in the Head

## Theme Three

Branchial arches and the gut tube

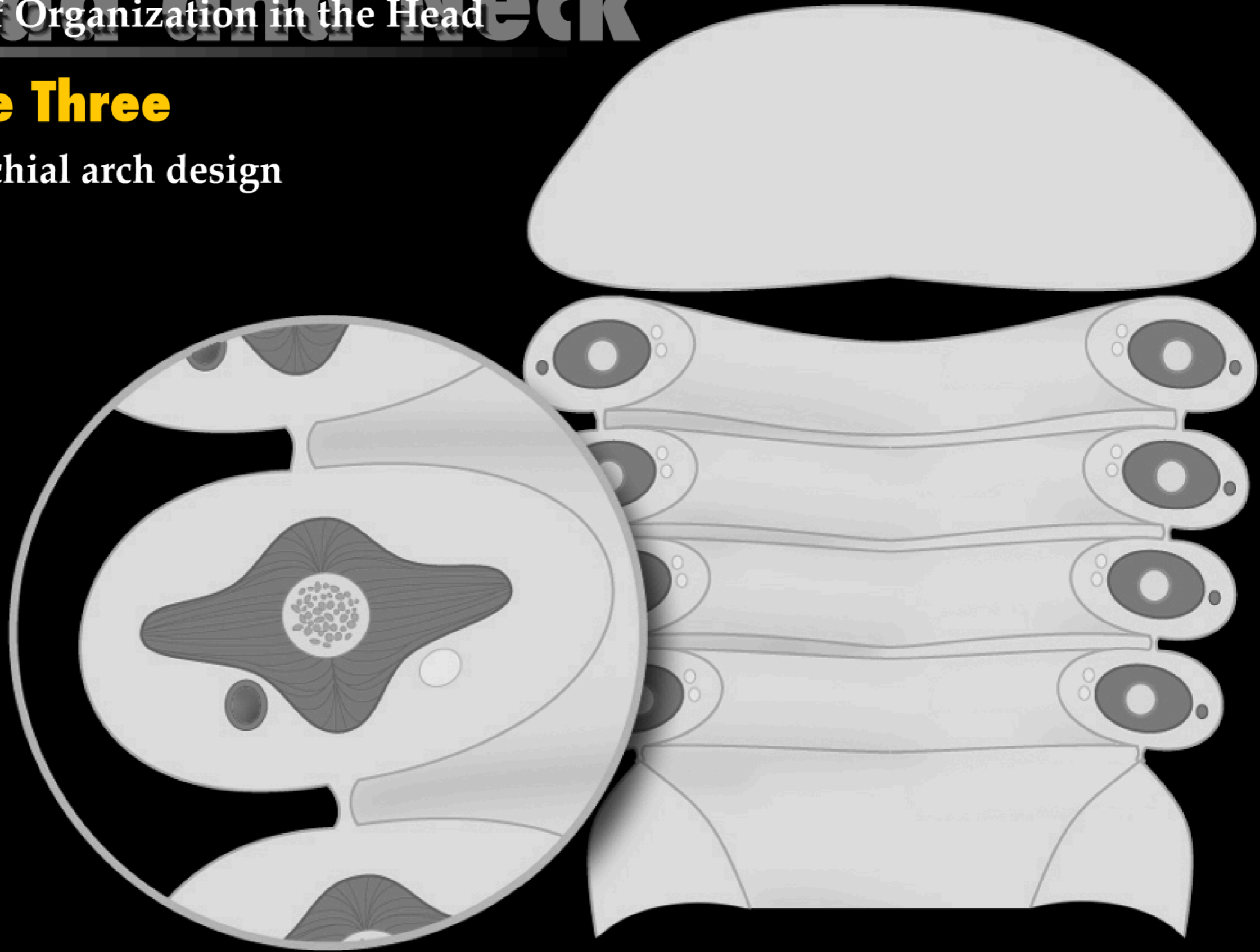


# Head and Neck

Patterns of Organization in the Head

## Theme Three

Branchial arch design



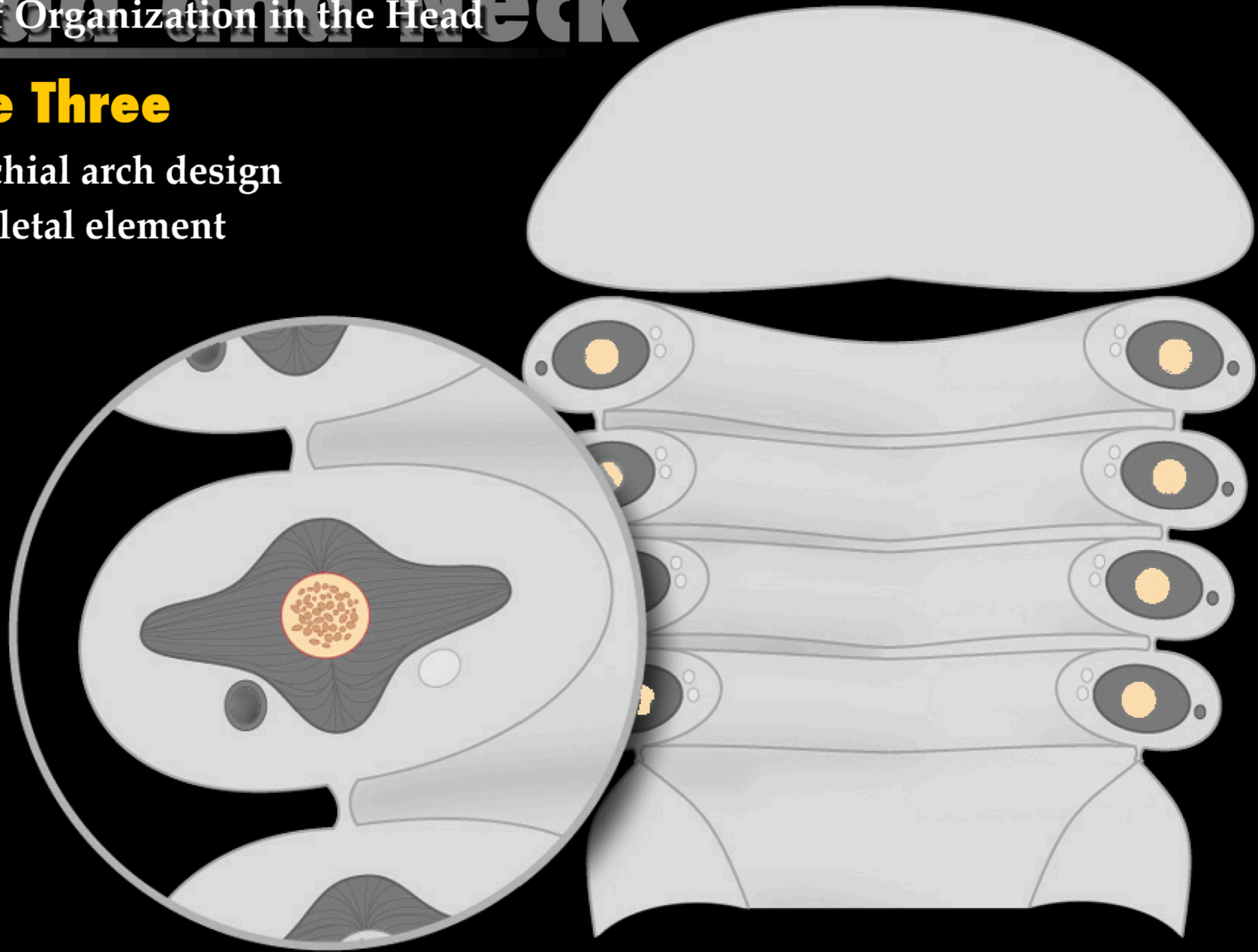


# Head and Neck

Patterns of Organization in the Head

## Theme Three

Branchial arch design  
Skeletal element



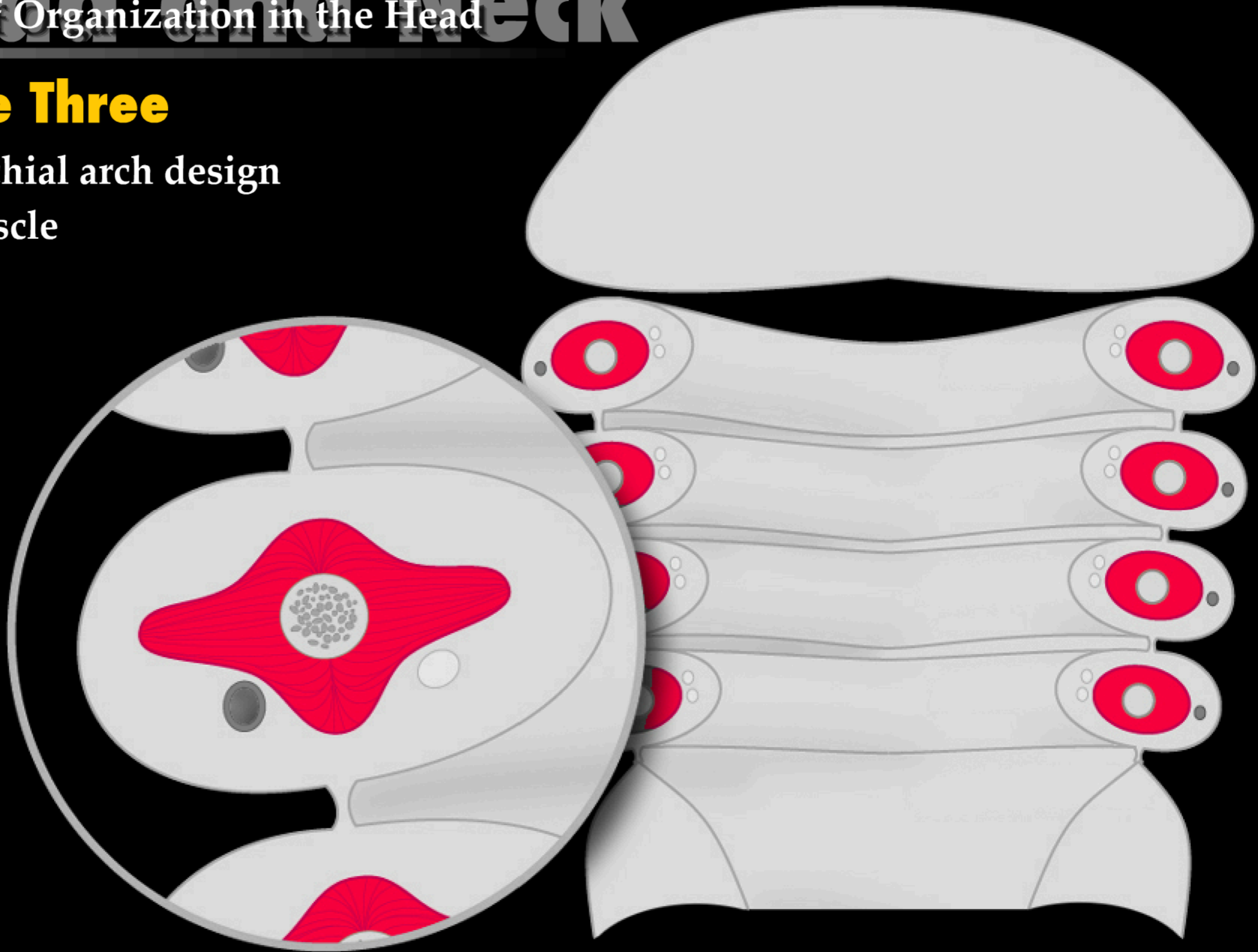
# Head and Neck

Patterns of Organization in the Head

## Theme Three

Branchial arch design

Muscle



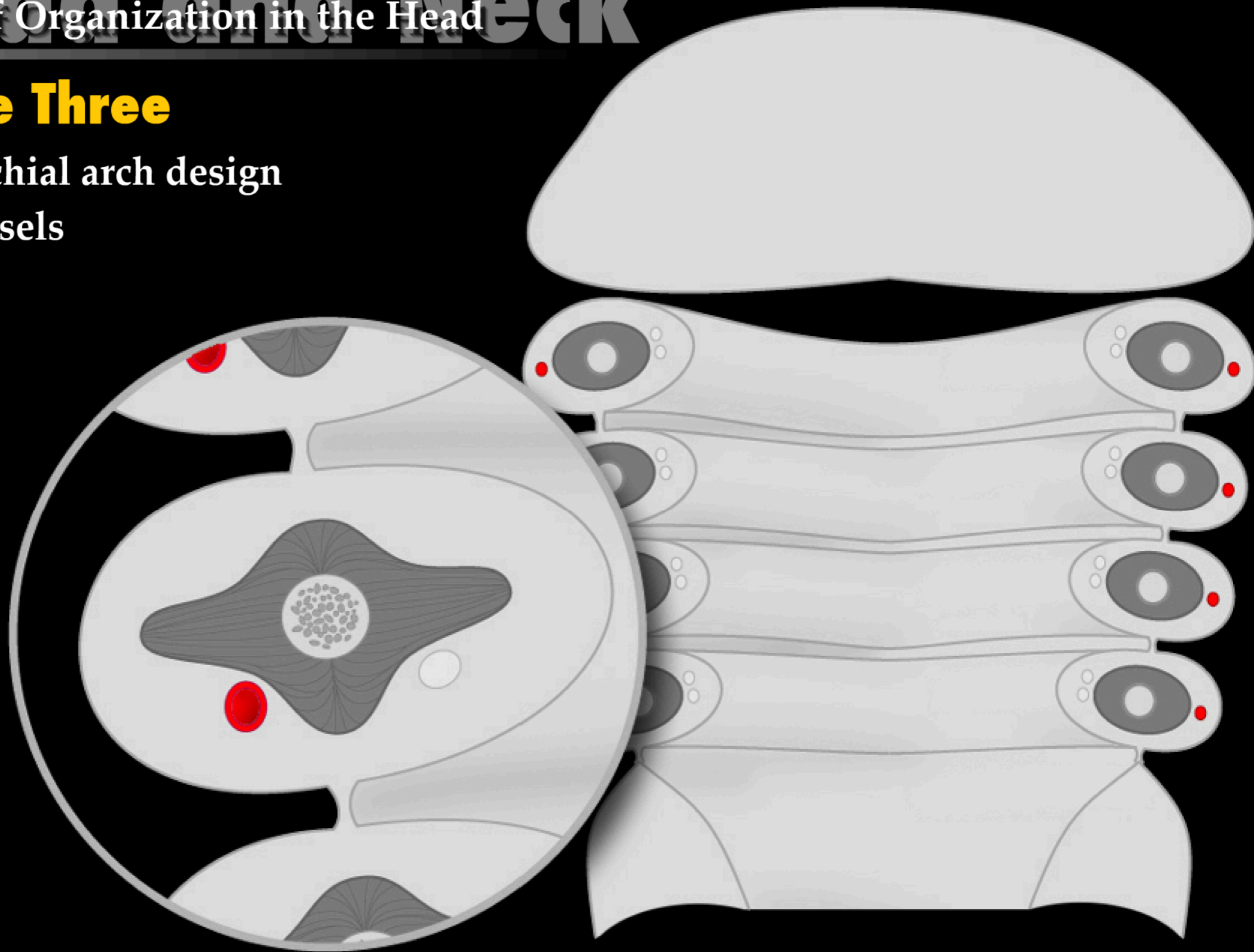
# Head and Neck

Patterns of Organization in the Head

## Theme Three

Branchial arch design

Vessels



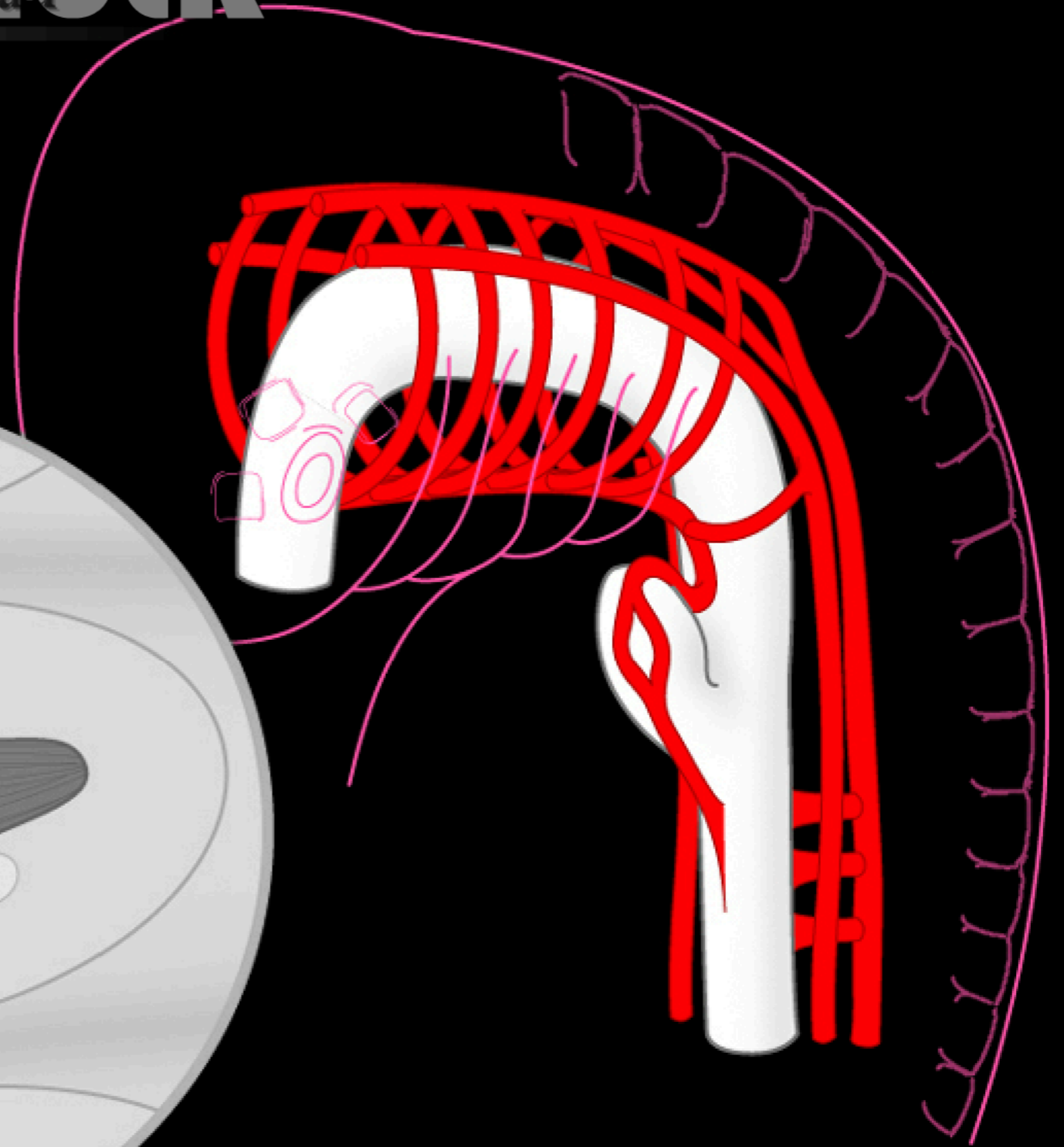
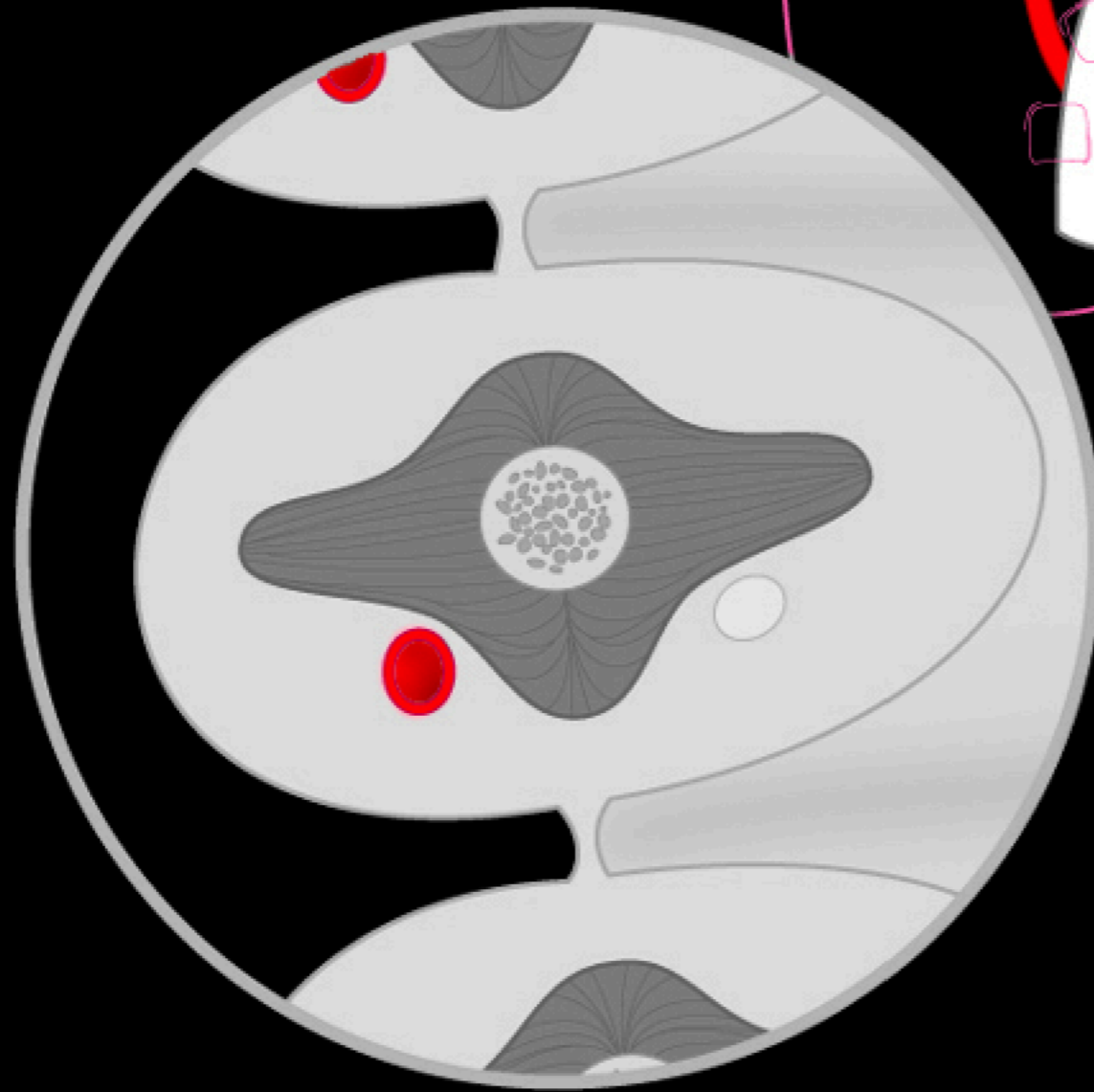
# Head and Neck

Patterns of Organization in the Head

## Theme Three

Branchial arch design

Vessels



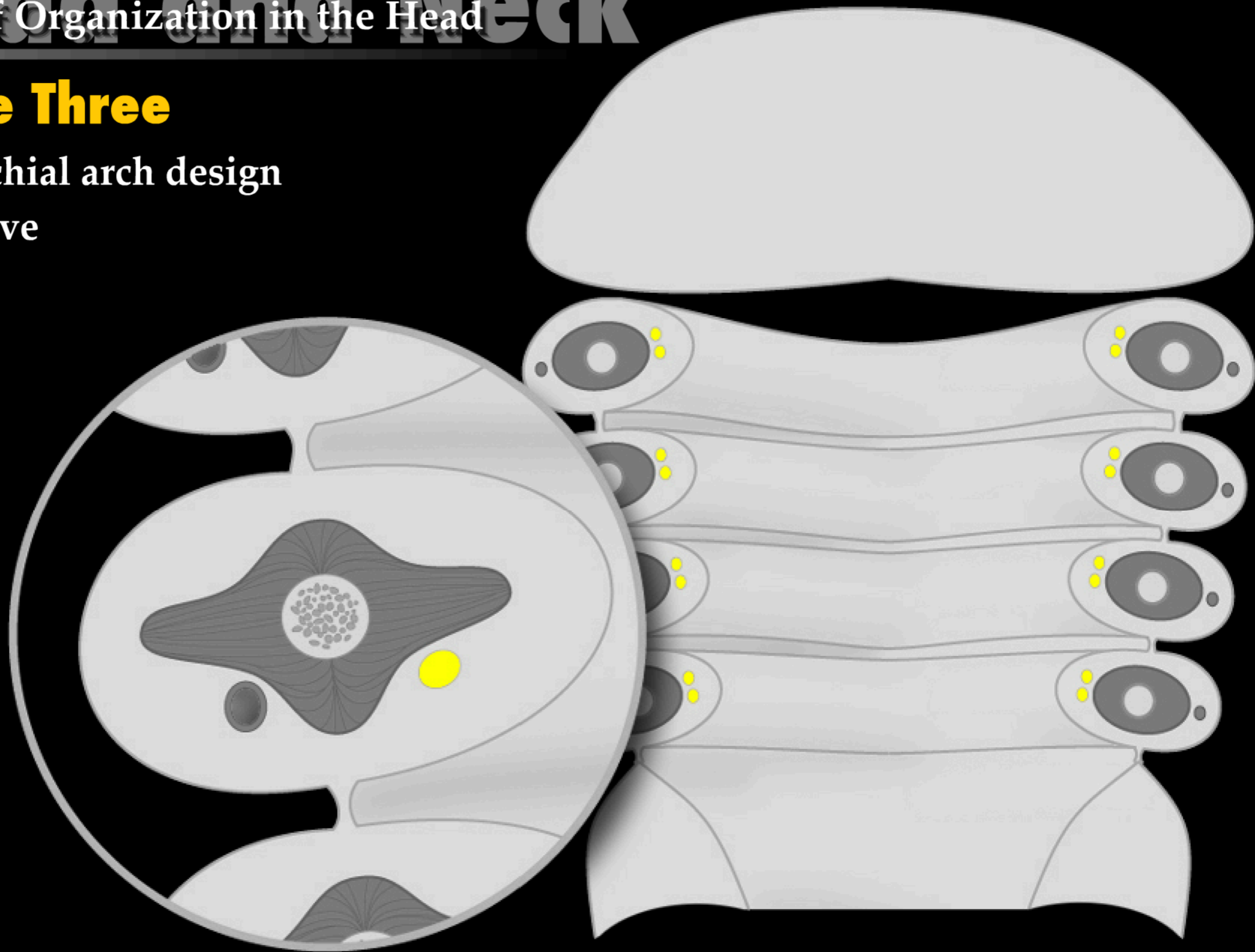
# Head and Neck

Patterns of Organization in the Head

## Theme Three

Branchial arch design

Nerve

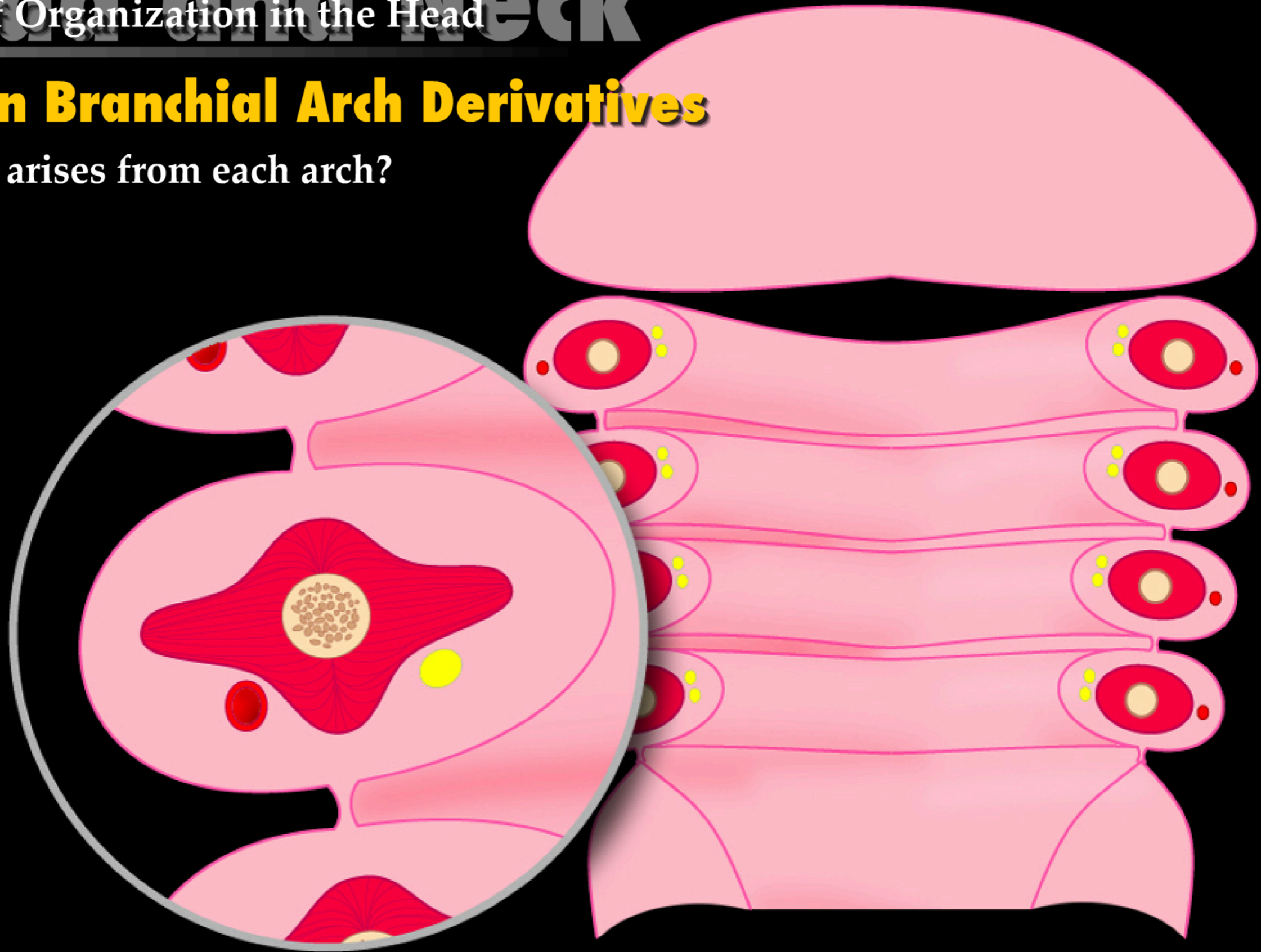


# Head and Neck

Patterns of Organization in the Head

## Human Branchial Arch Derivatives

What arises from each arch?

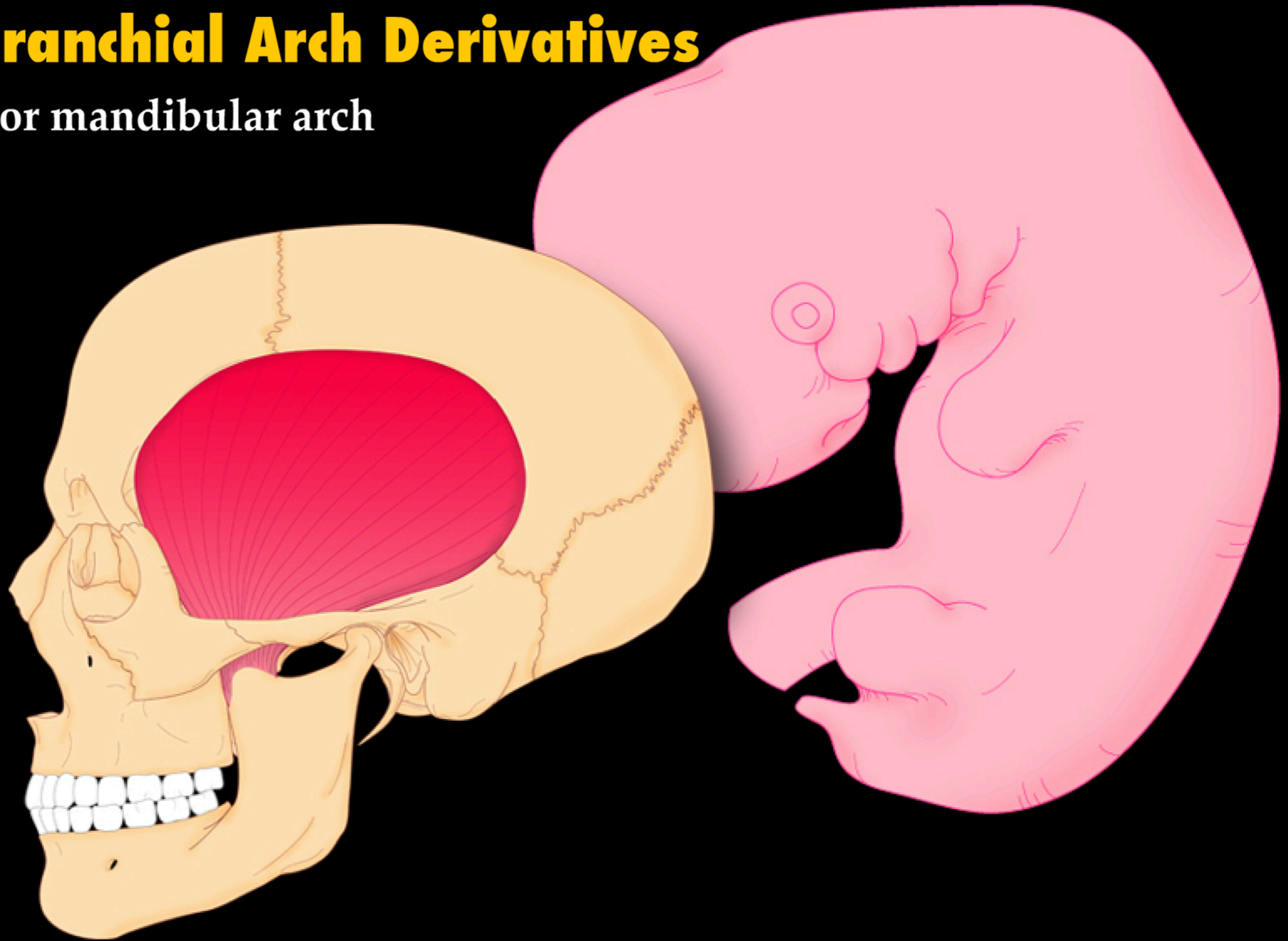


# Head and Neck

Patterns of Organization in the Head

## Human Branchial Arch Derivatives

First arch or mandibular arch

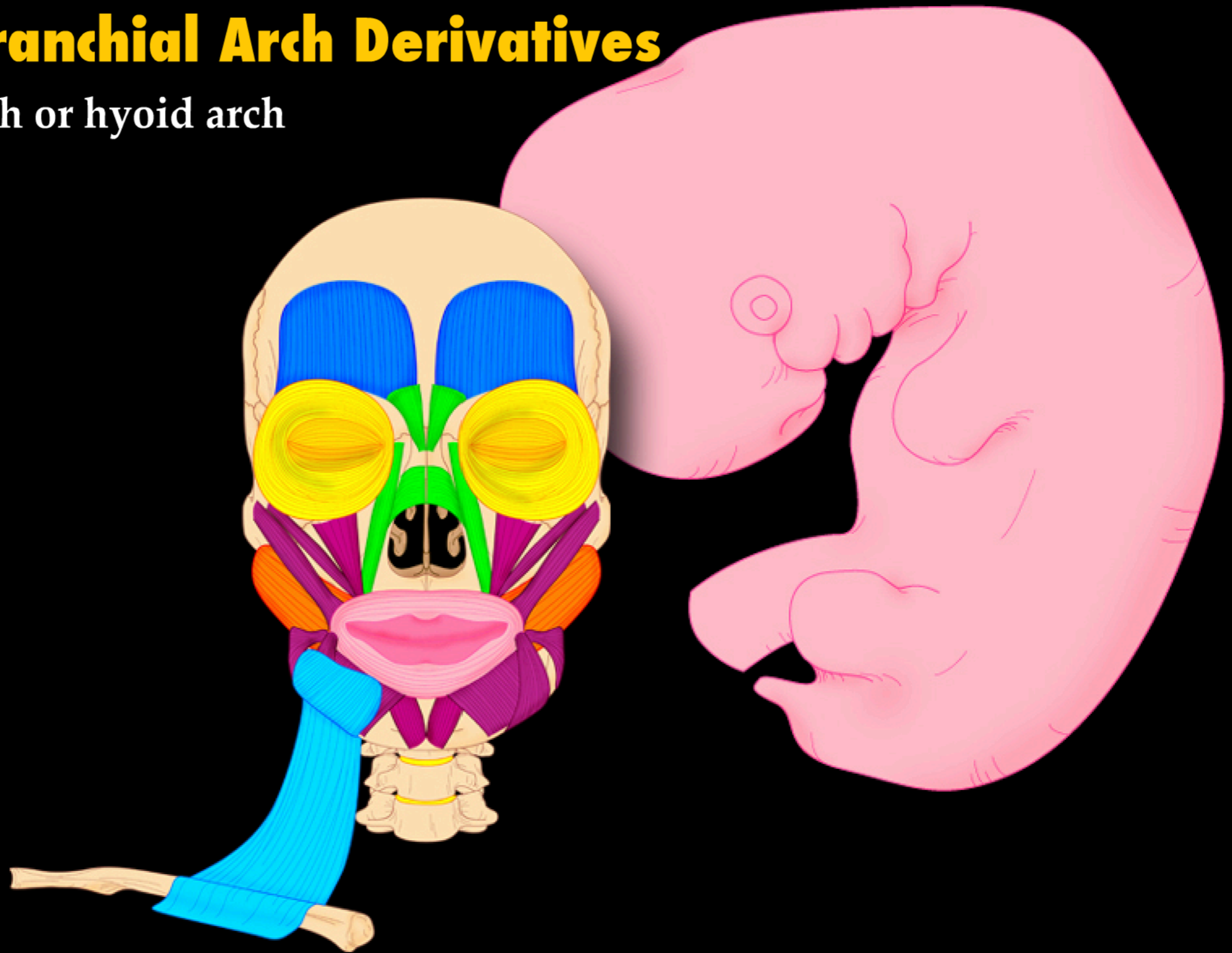


# Head and Neck

Patterns of Organization in the Head

## Human Branchial Arch Derivatives

Second arch or hyoid arch



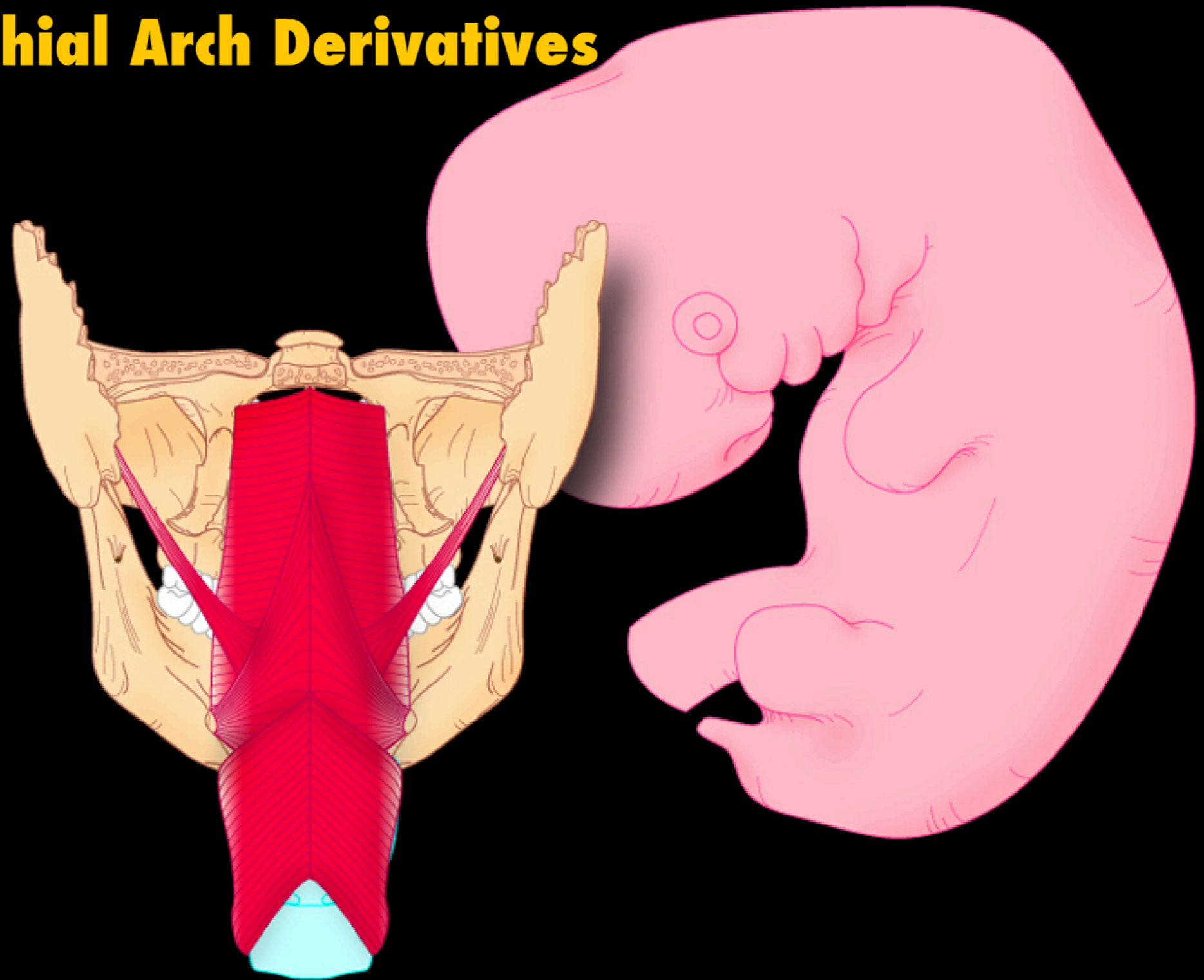


# Head and Neck

Patterns of Organization in the Head

## Human Branchial Arch Derivatives

Third arch

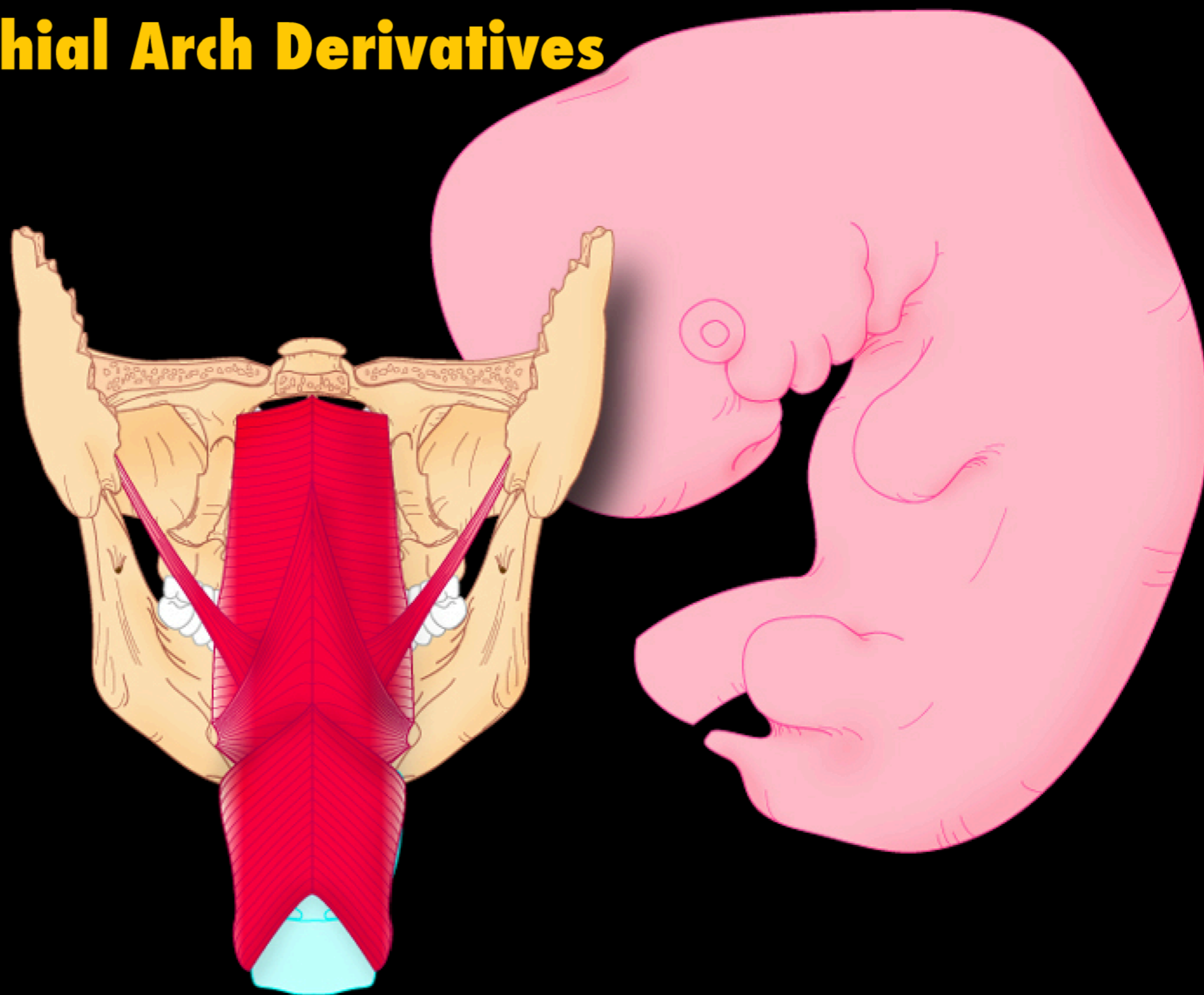


# Head and Neck

Patterns of Organization in the Head

## Human Branchial Arch Derivatives

Fourth arch

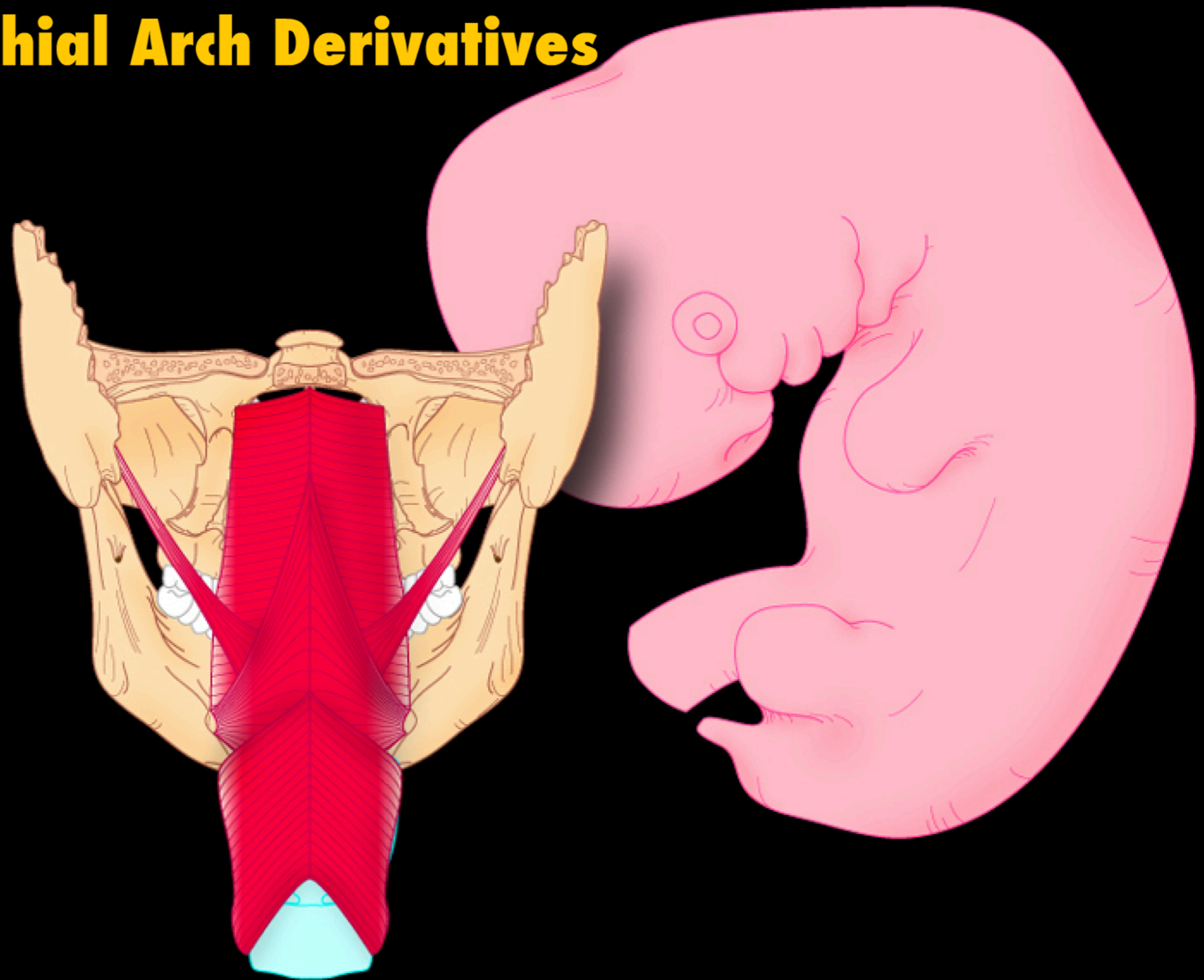


# Head and Neck

Patterns of Organization in the Head

## Human Branchial Arch Derivatives

Sixth arch

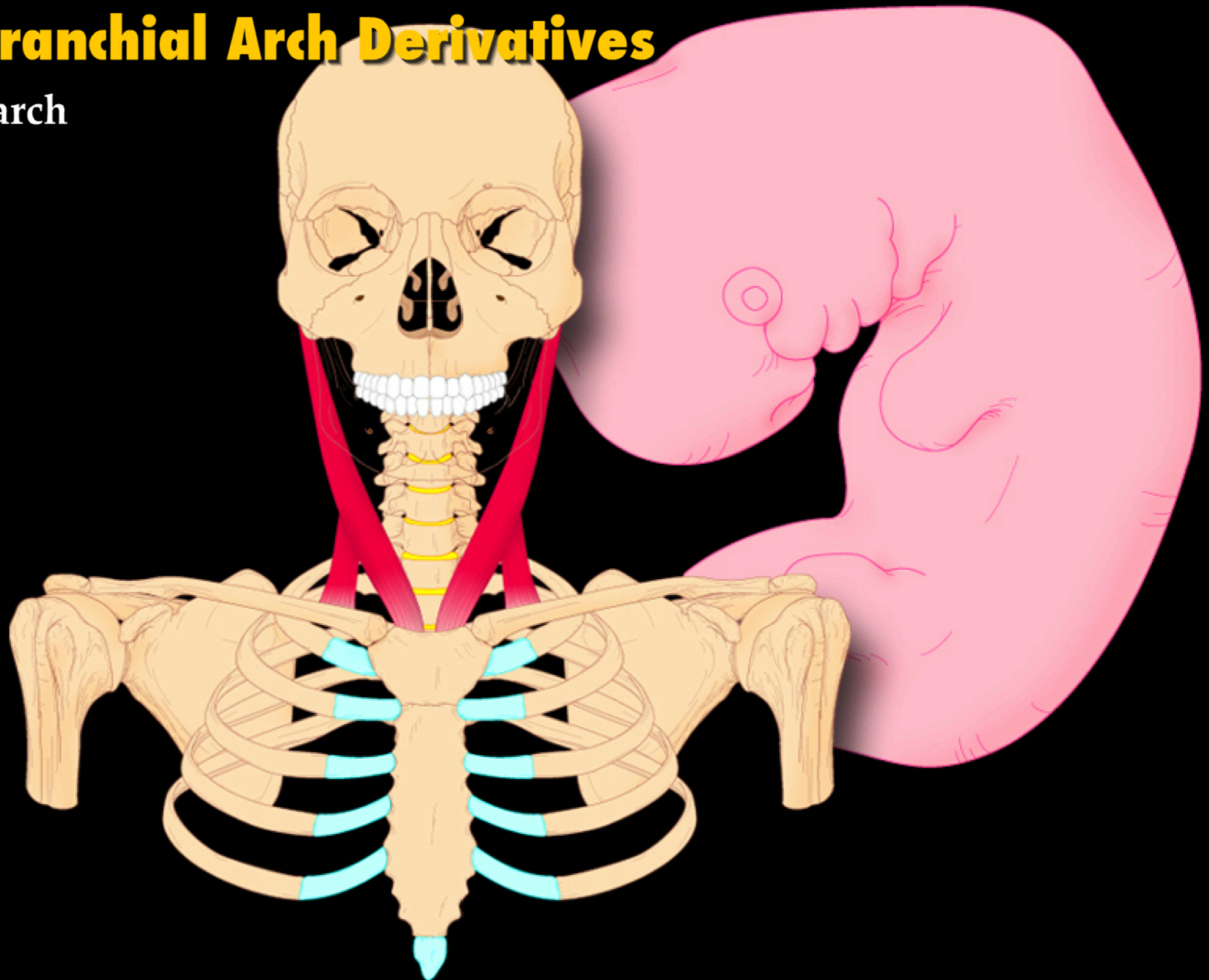


# Head and Neck

Patterns of Organization in the Head

## Human Branchial Arch Derivatives

Posterior arch



# Review of Neck Design

# Head and Neck

## Thinking About the Neck

What is the neck?

Body wall of the neck

Relationship to the head

