Head and Neck
Patterns of Organization in the Head

**Theme One**

Formation of neural tube
Neural tube
Neural crest
Patterns of Organization in the Head

Theme One
Development of anterior end of neural tube
Patterns of Organization in the Head

**Theme Two**

Review of the somite
Patterns of Organization in the Head

**Theme Two**

Occipital somites
Tongue muscles
Patterns of Organization in the Head

Theme Two

Pre-otic somites
Extrinsic eye muscles
Patterns of Organization in the Head

**Theme Three**

Branchial arches and the gut tube
Patterns of Organization in the Head

**Theme Three**

Branchial arch design
Patterns of Organization in the Head

**Theme Three**

Branchial arch design
Skeletal element
Patterns of Organization in the Head

**Theme Three**

Branchial arch design

Muscle
Patterns of Organization in the Head

**Theme Three**

Branchial arch design

Vessels
Patterns of Organization in the Head

**Theme Three**

Branchial arch design
Vessels
Patterns of Organization in the Head

**Theme Three**

Branchial arch design

Nerve
Patterns of Organization in the Head

Human Branchial Arch Derivatives

What arises from each arch?
Patterns of Organization in the Head

**Human Branchial Arch Derivatives**

First arch or mandibular arch
Patterns of Organization in the Head

**Human Branchial Arch Derivatives**

Second arch or hyoid arch
Patterns of Organization in the Head

Human Branchial Arch Derivatives

Third arch
Patterns of Organization in the Head

Human Branchial Arch Derivatives

Fourth arch
Patterns of Organization in the Head

Human Branchial Arch Derivatives

Sixth arch
Patterns of Organization in the Head

Human Branchial Arch Derivatives

Posterior arch
Thinking About the Neck

What is the neck?
Body wall of the neck
Relationship to the head