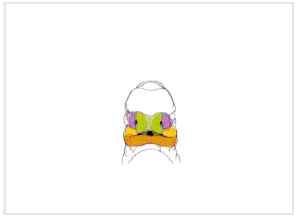


# BGD Lecture - Face and Ear Development



## Face Development Movie

The face is the anatomical feature which is truly unique to each human, though the basis of its general development is identical for all humans and similar to that seen for other species. The face has a complex origin arising from a number of head structures and sensitive to a number of teratogens during critical periods of its development. The related structures of upper lip and palate significantly contribute to the majority of face abnormalities.

## Head

The head and neck structures are more than just the face, and are derived from pharyngeal arches 1 - 6 with the face forming from arch 1 and 2 and the frontonasal prominence. Each arch contains similar Arch components derived from endoderm, mesoderm, neural crest and ectoderm.

Because the head contains many different structures also review notes on [Special Senses](#)), [Respiratory](#), Integumentary (Teeth), [Endocrine](#) (thyroid, parathyroid, pituitary, thymus) and [Ultrasound](#)- Cleft lip/palate.

## Hearing

We use the sense of balance and hearing to position ourselves in space, sense our surrounding environment, and to communicate. Importantly hearing is linked into postnatal neurological development (milestones) involved with language and learning.

Portions of the ear appear very early in development as specialized region (otic placode) on the embryo surface that sinks into the mesenchyme to form a vesicle (otic vesicle = otocyst) that form the inner ear.

## Lecture Links: [2014 Practical](#)

To introduce the developmental embryology of both the face and ear, and their associated abnormalities.