## Otoscopy

### Basics of otoscopy
- Using an otoscope, this is a simple outpatient examination that provides information about the external auditory canal, the tympanic membrane and some aspects of the middle ear too.
- Looking in ears and making a diagnosis is not easy, so practice every opportunity you have.
- Below is a systematic method to make sure you can perform otoscopy rapidly and without missing anything.

### Equipment for otoscopy
- Otoscope with light
- Multiple sized specula

### Procedure for otoscopy
- Start with the unaffected ear to get an idea of what is normal for this patient
- Pick the largest speculum that will comfortably fit in the ear to ensure a good view.
- Hold the otoscope like a pen and use your right hand for the patient’s right ear and left hand for the patient’s left ear.
  - Have your little finger extended to rest on the patient’s cheek to ensure you stay a constant distance away.
- Have a quick look behind the ear and at the pinna for any scars or signs of infection.
- Pull the pinna to straighten the canal and insert the otoscope gently. Then put your eye to the window to visualise.
- Make sure you look at the EAC on your way in for infection/stenosis.
- Once you can see the drum, ask yourself is it intact, is it of a normal colour, is it bulging or retracted, can you see fluid behind the drum, does the drum look particularly thin and see-through, are there white patches suggestive of tympanosclerosis?
- Follow the routemap below to visualise every aspect of the drum:
  - Handle of malleus
  - Lateral process of malleus
  - Attic – very important to visualise for cholesteatoma
  - Anterosuperior drum
  - Anteroinferior drum
  - Posteroinferior drum
  - Posterosuperior drum
- Repeat the procedure with the other ear.

### Top tips for otoscopy
- The portion of the EAC medial to the hair-bearing region is exquisitely sensitive. Be very careful and try not to touch the walls of the canal.
- The junction and anatomy between the bony and cartilaginous portion of the EAC varies in adults and children
  - To straighten the canal in adults, gently pull the pinna upwards and backwards.
  - In children, pull the pinna directly backwards alone.