

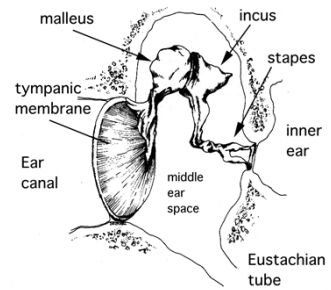
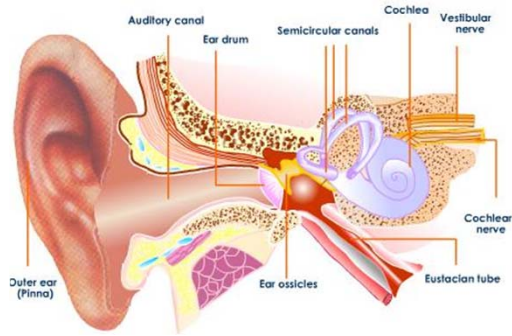
BIOL3833

Week 13: Neurobiology of Hearing Part 2

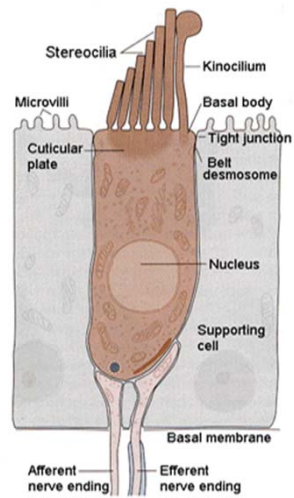
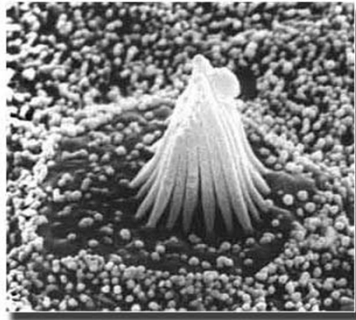
General principles of sensory coding

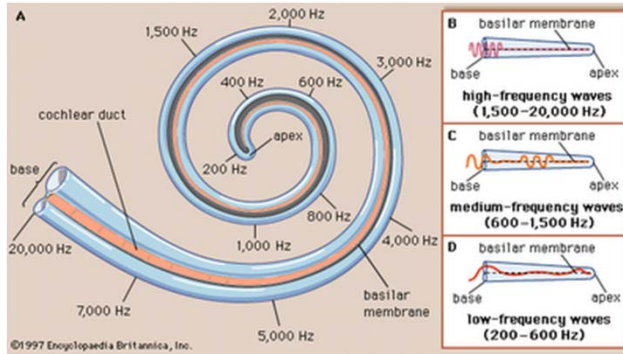
- Reception
- Transduction
- Coding
- Parallel processing
- Our sensory systems deceive us constantly
- Perception is an *active process*

Reception



Transduction

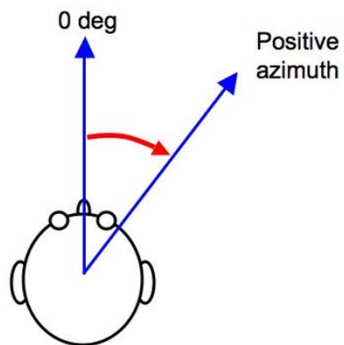




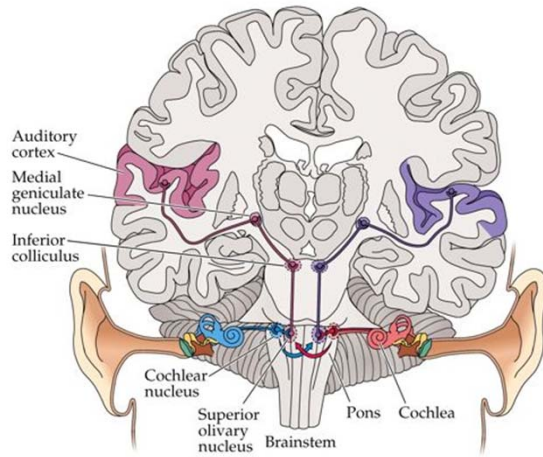
We now have *tonotopic* frequency encoding
 - and -
 The beginnings of *intensity* coding

Localizing sound

Azimuth



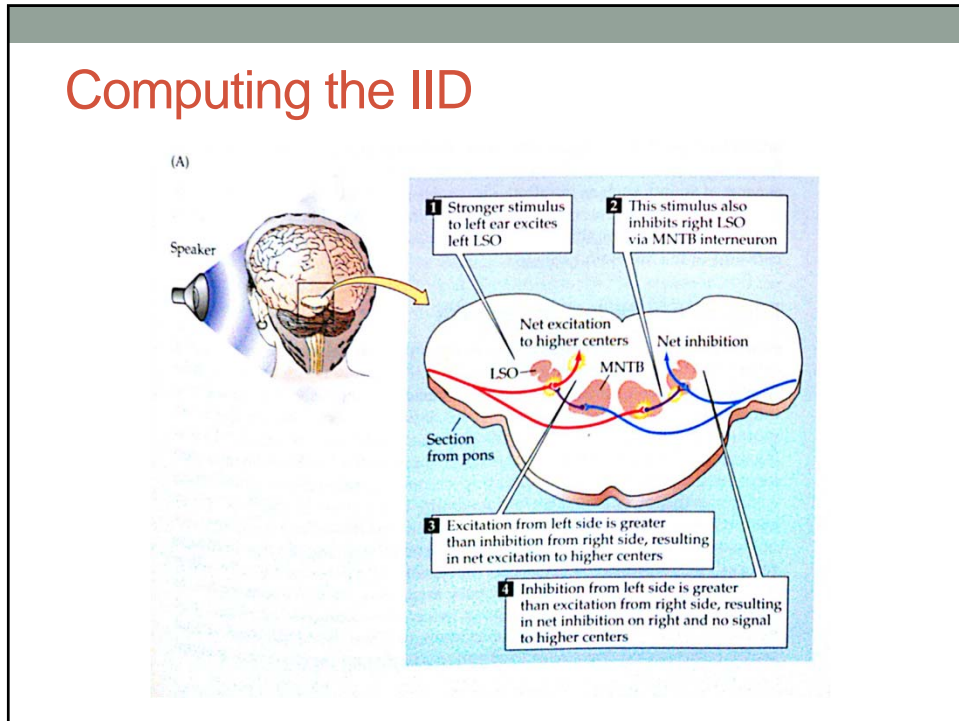
Finally: we are in the brain!



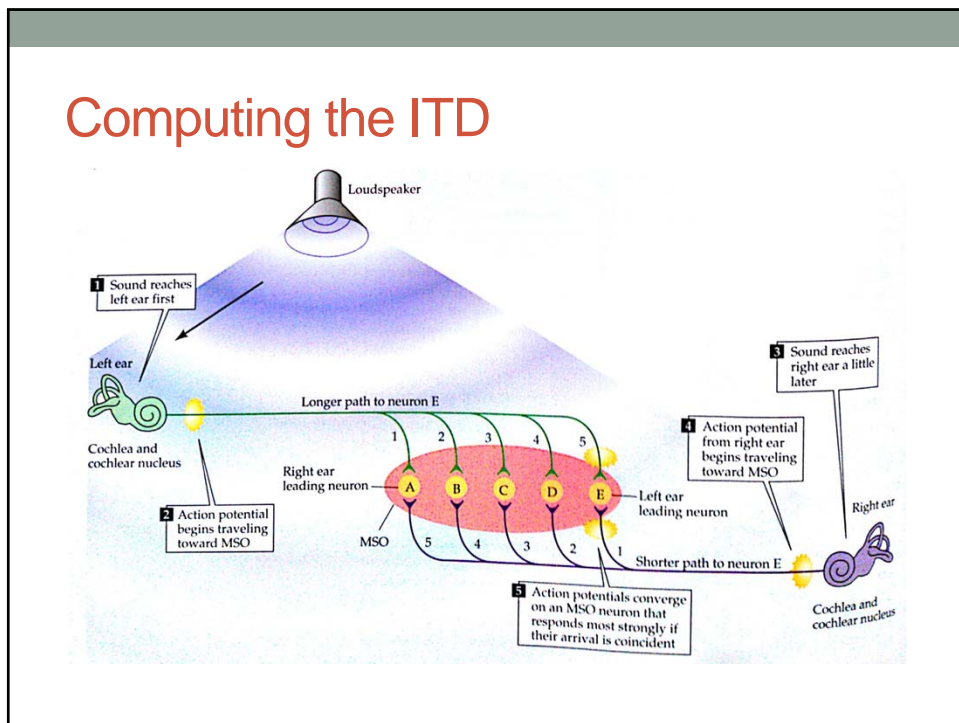
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Computing the IID









Computing the ITD



Always better as an [animation](#).

Our sensory systems deceive us constantly
Perception is an *active process*

- Sound reverse
- Overcoming noise
- Tritone paradox 
- Mystery melody  
- Phantom words 1 
- Phantom words 2 
- Phantom words 3 

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