## **Exercises for Systems Neuroscience,**

## One 0, 1 or more answers are correct.

#### 1. The cochlea

O is contained in the organ of Corti

O is made of four distinct chambers

O is filled with air

O is part of the middle ear

### 2. The basilar membrane

O is thinner at one end than at the other

O vibrates at locations that vary when the sound's timber varies

O has larger amplitude modulations for low than for high intensity sounds

O contains only outer hair cells

# 3. The pitch of a sound

O can vary if the sound intensity is varied

O is the main perceptual correlate of a pure tone's phase

O is mostly determined by a sound's frequency

O increases if the sound's wavelength decreases

## 4. Primary auditory cortex

O is located in the temporal lobes

O has a columnar organization

O is surrounded by secondary auditory areas

O receives inputs from the contralateral Medial Geniculate Nucleus

## 5. Sound localization

O is possible without binaural cues

O is computed primarily in circuits of the cerebellum

O is possible with interaural time differences in the order of microseconds

O can be affected by changing the shape of your pinnae