

## The Talking Ear

Can your ear talk to you? New research seems to show that your ear actually generates sound that echoes whatever you hear.

Startled scientists are making new discoveries that appear to show that we have hearing aids built into our ears. Yes, our ears do produce sounds. When sound hits the eardrums, the vibrations move bones within the ear, causing a bone called the stapes to vibrate. These vibrations are translated to pneumatic pressure within the cochlea. The oscillating pressure is picked up by tiny inner hairs in the cochlea that vibrate with the sound. These vibrations generate an electrical signal that is sent to the brain.

Researchers have learned that outer hair cells within the cochlea respond to the incoming signals by generating audible sounds that can be picked up by tiny microphones. The sounds are generated as the hairs dance up and down in time with the incoming sound, just like the cone of a loudspeaker. The effect is that the ear echoes the incoming sound a few thousandths of a second after it enters the ear. The echo generated within the cochlea is not necessary for hearing. However, scientists suspect that this feedback system helps people smoothly hear sounds that range from soft to loud. Some scientists have voiced their skepticism about these astonishing findings.

Our ability to hear sound is much more elegant in design than scientists ever expected. The technically precise details of the ear's design discredit all claims that the ear could have evolved.

### **James 1:22**

**"But be ye doers of the word, and not hearers only, deceiving your own selves."**

Prayer: Lord, let my voice praise You for all the great things You have done. Let me always be glad to hear Your Word and, assured of Your forgiving grace, put it into practice in my life. Amen.

REF.: Malcolm M. Browne. "Let's Hear it from the Ears." The Plain Dealer.