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* The cochlear duct contains the **organ of Corti.**
* The organ of Corti contains:
	+ A single row of inner hair cells
	+ Three rows of outer hair cells that have stereocilia (but no kinocilium) on their apical border and synapse with bipolar neurons of the cochlear (spiral) ganglion of CN VIII
	+ Supporting cells:
		- Pillar cells
		- Phalangeal cells
		- Border cells
		- Cells of Hensen
* The outer hair cells are in contact with a gelatinous mass called the **tectorial membrane** rich in **tectorin**.
* The organ of Corti responds to sound.



* Inner and outer pillar cells
	+ Tall cells with wide bases and apical ends that are attached to basilar membrane
	+ The central portions are deflected to form the walls of inner tunnel; apical portion contact each other.
* Phalangeal cells
	+ Outer phalangeal cells
		- Tall columnar cells that are attached to basilar membrane
		- Apical portions are cup-shaped to support the basilar portions of outer hair cells along with efferent and afferent nerve fibers
		- Do not reach the free surface of organ of corti
		- Space of Nuel: a fluid-filled gap around unsupported regions of the outer hair cells
			* Communicates with inner tunnel
	+ Inner phalangeal cells
		- Located deep to the innel pillar cells
		- Completely surround the inner hair cells
* Border cells
	+ Delineate the inner border of the organ of Corti
	+ Slender cells that support inner aspects of the organ of Corti
* Cells of Hensen
	+ Define the outer border
	+ Located b/w outer phalangeal cells and cells of Claudius