# Neurogenic placode

A neurogenic placode is an area of thickening of the epithelium in the embryonic head ectoderm layer that gives rise to neurons and other structures of the sensory nervous system.

Placodes are embryonic structures that give rise to structures such as hair follicles, feathers and teeth. The term “neurogenic placode” generally refers to cranial placodes that have neurogenic potential - i.e. those that give rise to neurons associated with the special senses and cranial ganglia. Cranial placodes include a diverse range of structures found across chordates, but the neurogenic placodes found in vertebrates arose later in evolution.

Neural placode tissue contains multipotent progenitors that are preferentially biased toward oligodendrocyte progenitor cell differentiation and presents a novel source of such cells for use in the treatment of a variety of pediatric and adult neurological disease, including spinal cord injury, multiple sclerosis, and metabolic leukoencephalopathies [1].

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