

form the olfactory tract. The olfactory tract is continued into the olfactory trigone, just in front of the anterior perforated substance. The axons of the mitral cells on reaching the olfactory trigone separate into three bundles, the **lateral olfactory stria**, the **medial olfactory stria** and the less marked **intermedial olfactory stria**.

The **lateral olfactory striæ** curve lateralward, a few of the fibers end in the olfactory trigone and the antero-lateral portion of the anterior perforated substance. Most of the fibers, however, pass into the uncus, the anterior end of the hippocampal gyrus, and there end in the complicated cortex of the hippocampal gyri. The lateral striæ more or less disappear as they cross the antero-lateral region of the anterior perforated substance.

The greater mass of the fibers of the olfactory tract pass into the lateral stria. Numerous collaterals are given into the plexiform layer of the subfrontal cortex, over which the striæ pass on their way to the uncus, where they intermingle with the apical dendrons of the medium-sized and small pyramidal cells of the pyramidal layer of this subfrontal or frontal olfactory cortex. The axons give rise to projection fibers which take an antero-posterior direction to the subthalamic region sending collaterals and terminal branches to the stria medullaris and others toward the thalamus. Some of the fibers extend farther back and are believed to reach the pons and medulla oblongata.

Most of the fibers of the lateral olfactory stria pass to the hippocampal region of the cortex, especially to the gyrus hippocampi, which may be regarded as the main ending place of the secondary olfactory path derived from axons of the mitral cells.

The fibers of the **medial olfactory striæ** terminate for the most part in the parolfactory area (*Broca's area*), a few end in the subcallosal gyrus and a few in the anterior perforated substance and the adjoining part of the septum pellucidum. Some of the fibers pass into the anterior commissure (**pars olfactoria**) to the olfactory tract of the opposite side where they end partly within the granular layer and partly in the neighborhood of the glomeruli of the olfactory bulb, thus connecting the bulbs of the two sides.

The **intermediate olfactory striæ** are as a rule scarcely visible, the fibers terminate in the anterior perforated substance, a few are said to continue to the uncus.

The trigonum olfactorium, anterior perforated substance and the adjoining part of the septum pellucidum are important primary olfactory centers, especially for olfactory reflexes; in these centers terminate many axons from the mitral cells of the olfactory bulb. In addition the gray substance of the olfactory tract and the gyrus subcallosus receive terminals of the mitral cells.

The pathways from these centers to lower centers in the brain-stem and spinal cord are only partially known. The most direct path, the **tractus olfactomesencephalicus** (*basal olfactory bundle of Wallenburg*), is supposed to arise from cells in the gray substance of the olfactory tract, the olfactory trigone, the anterior perforated substance and the adjoining part of the septum pellucidum. The fibers are said to pass direct to the tuber cinereum, to the corpus mammillare, to the brain-stem and the spinal cord. The fibers which enter the mammillary body probably come into relation with cells whose axons give rise to the **fasciculus mammillo-tegmentalis** (*mammillo-tegmental bundle of Gudden*) which is supposed to end in the gray substance of the tegmentum and of the aqueduct; some of its fibers are said to join the posterior longitudinal bundle and others to extend as far as the reticular formation of the pons.

Some of the fibers of the medial olfactory stria came into relation with cells in the parolfactory area of Broca and in the anterior perforated substance, whose axons course in the medullary stria of the thalamus. As the axons pass through the lower part of the septum pellucidum they are joined by other fibers whose cells