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It is well known that vocal learning in songbirds depends on a set of anatomically and functionally distinct telencephalic nuclei located in the neostriatum, archistriatum and paleostriatum. Specialized circuits interconnect these telencephalic nuclei with brainstem motor and premotor nuclei of the respiratory and tracheosyringeal systems. Discrete vocal control nuclei have also been identified in these same brain areas and with similar connections in a psittacine, the budgerigar (*Melopsittacus undulatus*). Budgerigars are small nomadic parakeets native to Australia that have complex vocal repertoires and learn new vocalizations throughout life. Much is known about vocal development, vocal learning, and auditory perception in this species, and it is clear that social factors, in both young and adult budgerigars, play a large role in what, when, and from whom budgerigars learn. For these reasons, we examined tissue levels of monoamines (NE, DA and 5-HT) in the brain of adult budgerigars. These neurotransmitters are involved in the regulation of aggression, affiliative behaviors, learning, and attention. Regional brain tissue from the midbrain and forebrain were dissected and analyzed by high performance liquid chromatography (HPLC-EC). Preliminary data from 14 birds indicates high levels of DA in the augmented paleostriatum (PA) and the lateral portion of the parolfactory lobe (LPO). These data parallel high levels of DA found in the neostriatum of mammals. Other brain areas related to vocal learning show a fairly even representation of monoamines.

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