


Special Feature on Drug Research and Diagnosis of Parkinson's Disease

(Guest editors: Professors Xue-chu Zhen and Hong-Yuan Chu)

The special feature of APS published in April, 2020 is focused on Drug Research and Diagnosis on Parkinson's Disease (PD) in which we collected 6 Reviews and 4 Research Articles with broad coverage from PD drug discovery, imaging probe, mitochondrial functions, synaptic plasticity, non-dopaminergic system to animal model and psychosis in PD. See the articles marked .

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Cover: Schematic illustration of cholinergic regulation in the striatum. ChIs exert influences on striatal function by regulating multiple targets (arrows). Activation of ChIs can reduce glutamatergic transmission to MSNs of both pathways via M2 and M4 mAChRs, trigger dopamine release from their terminals through nAChRs and generate feedback inhibition via M4 receptors. Although MSNs of both the direct and indirect pathways express M1 receptors, which increase the excitability of a neuron when activated, the direct pathway is inhibited by acetylcholine because of the high expression level of M4 receptors. See the article in pages 453–463.

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