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【演題名】

生後脳・成体脳におけるニューロン新生

【演題名（英語）】

Neurogenesis in the postnatal and adult brain

【講演要旨】

It is now widely accepted that in mammals, including humans, newly born neurons are continuously generated and incorporated into the functional neural network of the postnatal/adult brain. Neurogenesis in the mature adult brain was first reported by Altman and colleagues using a [<sup>3</sup>H]-thymidine-incorporation labeling method in the dentate gyrus (DG) of the rat hippocampus (Altman and Das, 1965). They published a series of research articles describing neurogenesis in various regions of the postnatal/adult rodent brain, including the neocortex and olfactory bulb. Since the discovery of postnatal/adult neurogenesis, many extensive studies have been performed on various aspects of neurogenesis, including proliferation and fate-specification of neural stem cells, and the migration, maturation and synaptic integration of newly born neurons. Furthermore, recent research has shed light on the intensive contribution of postnatal/adult neurogenesis to olfactory-related and hippocampus-mediated brain functions. We will summarize the current view of regulatory mechanism and functional contribution of neurogenesis in the postnatal and adult brain. We will also introduce our recent efforts to reveal novel physiological roles of neurogenesis with newly developed technologies.