Abstract

Spontaneous coordinated neuronal activity is a hallmark of the developing brain and plays a pivotal role in the formation of neuronal circuits. GABAergic interneurons critically contribute to cortical development starting from neurogenesis and migration, to activity-dependent circuit refinement. In contrast, the dynamics of GABAergic interneurons during postnatal development remain poorly understood. Here I will discuss recent advances made in the study of specific GABAergic subpopulations in the generation of coordinated activity patterns in the mouse barrel cortex and their specific role as functional regulators of developmental dynamics *in vivo*.