



## How Does Motor Inhibitory Control Emerge from the Interplay between Reactive and Proactive Inhibition

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### Message from the Guest Editor

Inhibitory control is a multifaceted executive function that encompasses different types of processes. Motor inhibition is one distinct type of inhibition, which refers to the ability to inhibit prepotent motor responses, and it is usually measured via the go/no-go task or the stop-signal task. At its turn, motor inhibition has two separable neuropsychological domains, i.e., reactive inhibition, (the ability to stop a response outright when a stop instruction is presented), and proactive inhibition, (the ability to shape the motor strategy according to the context in which a subject is embedded). Even though it has been shown that they share partially overlapping neural substrates, there is no doubt that these two components have complementary functions and can be selectively impaired in diseases in which impulses are poorly controlled. Most of the previous works have focused on reactive inhibition, and only recently, proactive mechanisms have attracted attention. However, there is still sparse evidence of the way these two components interact with each other.





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