

## Invited Lecture

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### Title

Reduction of Retrograde Interference in a Motor Learning by Idiosyncratic Cross-Modal Mappings

### Abstract

Humans memorize multiple movement patterns suitable for different dynamic transformations. Before the consolidation, the motor memory is easy to interfere by experiencing a contradicting motor task (retrograde interference). It has long been assumed that color cues to highlight differences between two opposing force fields can allow participants to independently form two motor memories without experiencing retrograde interference; the results were not successful (e.g., Howard et al., 2013). In the research, we showed that, if the participant chose the color cues “suitable to their impression toward the motor task”, the cues worked effectively to memorize the motor task without retrograde interference.