

## Development of Cognitive Control Across the Lifespan

Cognitive control refers to processes that enable the efficient regulation and coordination of behavior according to internal and external goals. Some of them are highly sensitive to age-related changes depending on the recruitment of prefrontal lobe networks. To determine what kind of control processes are highly sensitive or insensitive to age, our research lab has applied various experimental tasks and research methods. In particular, the following control and learning processes have been investigated in my lab:

- task switching
- inhibitory control
- error monitoring
- context updating
- action-effect learning
- feedback-based learning
- implicit learning

### Selected publications:

Kray, J. & Schneider, W. (2018). Selbstregulation, Metakognition und kognitive Kontrolle. In U. Lindenberger, & W. Schneider (Hrsg.), *Entwicklungspsychologie*. Weinheim: Beltz.

Kray, J., & Ferdinand, N. K. (2014). Task switching and aging. In J. Grange, & G. Houghton (Eds.), *Task switching and cognitive control* (pp. 350-371). Oxford: Oxford University Press.