Research Issues

Look at our selection of exciting scientific questions we are working on. After choosing the research master in cognitive neuropsychology you might be working on this as well!

Perception, attention, and awareness

How do we find our car in IKEA’s parking lot? How can we objectively measure if a male’s eyes are automatically attracted to long legs? How do we recognize that something is a car or a leg in the first place, and what if you cannot distinguish between these two? When does red turn into green and why do some patients see red nor green even though there is nothing wrong with their eyes?

Emotion and motivation

Why do you think that others are often irrational in their decisions? How is it that we still remember what we were wearing on September 11th, but have no clue what we wore last week? Are you telling the truth when you reassure parents of a premature infant that it will be able to graduate from University one day?

Mapping the Brain

What happens in the brain while people have a brilliant new idea? Is it true that your visual cortex knows about a sound before the auditory cortex does? An how could you measure that? Why does brain damage more often lead to visual problems on the left side than on the right side? Can we build computer models of pharmacological effects on the brain so that in the future we can simulate the effects of drugs rather than test them on human subjects?

Changing cognition

Can we protect our brains from deteriorating as we get older? Does daily exercise have an effect on brain function in patients with Alzheimer’s disease? Ever wondered whether the ‘brain training’ devices available on the market really work? And what about omega-3 in your diet, does it really boost your memory? Are neurofeedback sessions effective in treating ADHD? Will we be able to predict substance abuse based on someone’s genetic make-up?