Good vision is paramount for a large variety of everyday tasks involving simple movements, such as reaching for a glass of water, and more complex ones, such as taking a swing in baseball. One of the ways in which we achieve good vision is by moving our eyes. Humans use a combination of many different types of eye movements in order to see better, to guide goal-directed movements to physical objects in our environment, and to control posture, balance and gait. My lab investigates how the human brain transforms visual signals into eye movement commands and how eye movements affect vision and visually-guided movements. We are also interested in what happens to these processes in disease. I will report results from studies in patients with schizophrenia and healthy adults and discuss how this research can help our understanding of normal and abnormal brain functioning. Our most recent studies involve testing baseball players with the ultimate aim of developing training tools for visual-motor function.