Traumatic Brain Injury is a major cause of death and disability worldwide. Therapeutic options are almost limited to surgical interventions and symptomatic relief owing to the complexity of pathophysiological processes including a clinically relevant neuroinflammation. This seminar consists of two parts with a focus on clinical practice (neurosurgery, neuromonitoring, and neuroprotection by PD Dr. Axel Neulen, day 1) or experimental research (animal models, pathophysiology i.e. neuroinflammation by Prof. Dr. Michael Schäfer, day 2).