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SCIENTIFIC SEMINAR

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Inducing a Schwann cell-like repair phenotype in oligodendrocytes enables axonal regrowth after injury

After a peripheral nerve injury, Schwann cells convert into repair cells that clear axon and myelin debris from the injured nerve and promote axonal regrowth. In contrast, after an injury in the central nervous system, oligodendrocyte myelin, axonal debris and the formation of a glial scar prevent axonal regrowth. In this study, we show that the phosphatase Dusp6 acts as a key inhibitor of oligodendrocyte plasticity after injury and ablating Dusp6 in oligodendrocytes allows their demyelination and conversion into repair cells. After a spinal cord injury, repair oligodendrocytes remove axon growth inhibitory cues, which enables injured axons to regrow through and below the glial scar.

Thursday, 15.06.2023, 12:15 pm

Host:
Hauke Werner
Department of Neurogenetics
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Seminar room, 4th floor
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