

## Commonplace helper cells may have key role in nerve regeneration

Researchers at the University of Wisconsin–Madison have found a switch that redirects helper cells in the peripheral nervous system into “repair” mode, a form that restores damaged axons.

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The new study suggests tactics that might trigger or accelerate this natural regrowth and assist recovery after physical injury, says John Svaren....

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Schwann cells create the insulating myelin sheath that speeds transmission of nerve impulses. In the repair mode, Schwann cells form a fix-up crew that adds house cleaning and stimulation of nerve regrowth to the usual insulating job.

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[They] also secrete signals that summon blood cells to aid the cleanup, and they map out a pathway for the axon to regrow. Finally, they return to the insulator role to grow a replacement myelin sheath on the regenerated axon.

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In epigenetics,...processes are often regulated through a balance between “stop” and “go” signals....

“This pathway [in the Schwann cell transition] amounts to an on-off switch that is normally off,” Svaren says, “and we want to know how to turn it on to initiate the repair process.”

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [Study Finds a Key to Nerve Regeneration](#)**