

# New findings on neurogenesis in the spinal cord

March 5 2014

---

Research from Karolinska Institutet in Sweden suggests that the expression of the so called MYC gene is important and necessary for neurogenesis in the spinal cord. The findings are being published in the journal *EMBO Reports*.

The MYC gene encodes the protein with the same name, and has an important role in many cellular processes such as proliferation, metabolism, cell death and the potential of differentiation from immature stem cells to different types of specialized cells. Importantly it is also one of the most frequently activated genes in human cancer.

Previously MYC has been shown to promote proliferation and inhibit differentiation in dissociated cells in culture. However, in the current study researchers demonstrate that in the intact neural tissue from chickens, MYC promotes differentiation of neural cells rather than their proliferation.

"We hope that this news knowledge can be important for developing future strategies to promote [nerve cell development](#), for example in patients with [spinal cord](#) injuries," says principal investigator Marie Arsenian Henriksson, professor at the Department of Microbiology, Tumor and Cell Biology.

Provided by Karolinska Institutet

Citation: New findings on neurogenesis in the spinal cord (2014, March 5) retrieved 26 April 2024 from <https://medicalxpress.com/news/2014-03-neurogenesis-spinal-cord.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.