

Monday, December 15, 2008

How Do Stem Cells Help the Brain Recover from Stroke?

A **stroke** causes injury to part of the brain. One potential treatment of stroke involves **stem cells**. Distinguished Professor **Michael Chopp** of the **Department of Physics** and his colleagues at **Henry Ford Hospital** have recently published a paper titled **'Down-regulation of Neurocan Expression in Reactive Astrocytes Promotes Axonal Regeneration and Facilitates the Neurorestorative Effects of Bone Marrow Stromal Cells in the Ischemic Rat Brain'** in the journal *Glia* (Volume 56, Pages 1747-1754, 2008). Chopp uses **bone marrow** stromal cells, which is a mixed population including **mesenchymal stem cells: multipotent** stem cells that can **differentiate** into a variety of cell types. The ultimate goal of this research is to find treatments that allow the brain to more fully recover from a stroke by helping the damaged **neurons** in the brain regrow.

SUMMARY

A stroke causes injury to part of the brain. One potential treatment of stroke involves stem cells.

Created by Brad Roth (roth@oakland.edu) on Wednesday, March 11, 2009
Modified by Brad Roth (roth@oakland.edu) on Thursday, March 12, 2009
Article Start Date: Wednesday, March 11, 2009