Stem cells transplanted in human brain create myelin

Neural stem cells transplanted into the brains of people with Pelizaeus-Merzbacher disease (PMD) can differentiate and begin producing the myelin sheaths that these patients lack, according to results of a Phase I clinical trial published today (October 10) in *Science Translational Medicine*. Myelin, the fatty insulating layer wrapped around nerve axons, is essential for proper nerve signaling. Researchers hope that these stem cell-derived myelin-producing cells may someday help patients recover brain function.

"This is an encouraging first step," said neurogeneticist Grace Hobson at Nemours Biomedical Research in Delaware, who investigates PMD but did not participate in the research. The disease currently has no treatment, but the new results give hope that stem cell transplantation may one day help restore nerve function in PMD patients, she said.

View the original article here: <u>Stem Cells Myelinate Human Brain – Scientist (blog)</u>