

Creating neurons directly from skin cells of humans

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The New York Stem Cell Foundation (NYSCF) – a non-profit organization dedicated to advancing cures for major diseases through stem cell research – today applauded the announcement by Stanford University scientists, led by NYSCF – Robertson Investigator Dr. Marius Wernig, that they directly converted skin cells of humans into functional neurons. These neurons will allow researchers to study neural diseases with the ultimate goal of developing more effective treatments and cures.

In a paper published in the online edition of the journal *Nature*, Dr. Wernig and colleagues reported that they created functional [neurons](#) from [skin cells](#) by the addition of four proteins. Recent work has shown that with four factors, somatic cells can be reprogrammed into a pluripotent state and then differentiated into various cell types. This newly published work skips the step of creating induced pluripotent stem cells that are often tumorigenic.

"This remarkable advancement by an inaugural member of our NYSCF – Robertson Investigator program makes this an exciting time of rapid progress for stem cell science," said Susan L. Solomon, CEO of The New York Stem Cell Foundation. "It is imperative that we continue to encourage and support stem cell research in whatever form it takes, including both iPS reprogramming and human embryonic stem cell research. The search for cures is too important to close off any avenue that scientists believe is leading us closer to that goal."

"Dr. Wernig and his colleagues have provided researchers with critical tools we need as we seek to understand how diseases work and how we can prevent their progression," said Dr. Kevin Eggan, Chief Scientific Officer of The New York Stem Cell Foundation.

Provided by New York Stem Cell Foundation

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