

Can stem cells repair damaged eyes and reverse blindness?

Hundreds of thousands of people who are registered blind have been offered new hope after scientists discovered special stem cells in the human eye which can be altered to pick up light.

Researchers at the University of Southampton have discovered a reservoir of stem cells in an area of the eye called the corneal limbus.

And they have proven that, in the right environment, they can be transformed into photo-receptor cells which react to light.

Scientists are hopeful that implanting the cultured stem cells in a damaged eye could reverse blindness.

It could offer a potential cure for the hundreds of thousands of people suffering macular degeneration or retinitis pigmentosa, which are both caused by the loss of photo-receptor cells in the eye.

And researchers were amazed to find that the cells even existed in the eyes of a 97-year-old, opening up the possibility that the treatment could work for the elderly.

“These cells are readily accessible, and they have surprising plasticity, which makes them an attractive cell resource for future therapies,” said Professor Andrew Lotery, of the University of Southampton and a Consultant Ophthalmologist at Southampton General Hospital led the study.

“This would help avoid complications with rejection or contamination because the cells taken from the eye would be returned to the same patient.”

Read full original article: [Hope for blind as scientists find stem cell reservoir in human eye](#)