

Research advance may lead to new treatments for glaucoma

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Researchers have developed a tool to not only model the underlying disease mechanisms of glaucoma, but also to help discover and test new pharmacological strategies to combat the neurodegeneration that occurs in patients with glaucoma.

Investigators designed a method that allowed them to take patient-derived induced [pluripotent stem cells](#) and turn them into [retinal ganglion cells](#), which are lost as glaucoma progresses.

"Our ability to direct the differentiation of human induced pluripotent stem cells to functional retinal ganglion cells allows for many new and exciting prospects for personalized medicine," said Dr. Jason Meyer, co-author of the *Stem Cells* study.

More information: Sarah K. Ohlemacher et al. Stepwise Differentiation of Retinal Ganglion Cells from Human Pluripotent Stem Cells Enables Analysis of Glaucomatous Neurodegeneration, *STEM CELLS* (2016). [DOI: 10.1002/stem.2356](https://doi.org/10.1002/stem.2356)

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