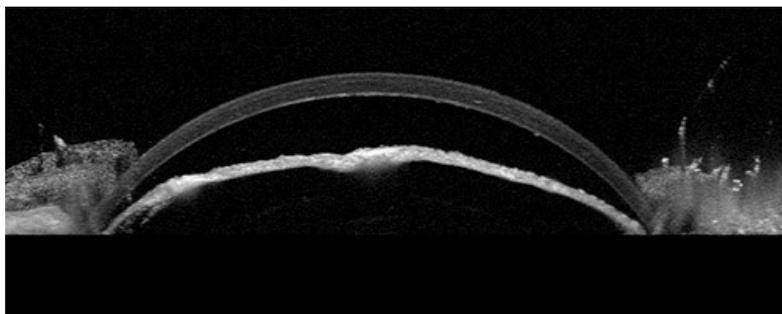


Glaucoma Research Group



Group leader: **Professor Ann Logan**
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Overview

Glaucoma is a disease in which damage to the optic nerve leads to the progressive, irreversible death of retinal cells and vision loss. Glaucoma is the second leading cause of blindness. The Glaucoma research group aims to fast track the translation of discoveries from the University of Birmingham research laboratories to improve outcomes for all patients with this debilitating degenerative condition.

Our research group

Our ophthalmologists, psychiatrists, psychologists, neurologists, neuroscientists and bioengineers work together to develop a multi-disciplinary approach to research into glaucoma. We are pioneering advances in our understanding of the cellular and molecular events that underlie the disease to deliver excellence in innovation for the treatment of this complex disease to deliver excellence in innovation for the treatment of this complex disease.

Of special interest to the group is research that advances our understanding of the mechanisms responsible for retinal damage and the loss of retinal neurons during disease progression. Linked to this is the development of novel neuroprotective drugs that will help preserve the vision of glaucoma patients.

We also have a particular interest in developing a better understanding of the cause of the ocular hypertension that can develop in glaucoma and how new multi-modal drugs may help reduce ocular pressure and protect the retina from further damage.

Current Projects

[Open all sections](#)

- Rescuing Retinal Ganglion Cells by Survival Signaling – Wellcome Trust funded project led by Dr Zubair Ahmed
- Evaluating novel anti-fibrotic drugs that reduce ocular hypertension – BBSRC funded project led by Professor Ann Logan

Recent Publications

- Vigneswara V, Berry M, Logan A, Ahmed Z (2012) Pharmacological inhibition of caspase-2 protects axotomised retinal ganglion cells from apoptosis in adult rats. *PLoS One* 7(12):e53473.
- Ahmed Z, Kalinski H, Berry M, Almasieh M, Ashush H, Slager N, Brafman A, Spivak I, Prasad N, Mett I, Shalom E, Alpert E, Di Polo A, Feinstein E, Logan A (2011) Ocular neuroprotection by siRNA targeting caspase-2. *Cell Death Dis* 2:e173.

Staff

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