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Visual pathway white matter alterations in glaucoma

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Propositions

- 1. Glaucoma is a degenerative disease of the entire visual pathway, and not of the eyes only. (this thesis)
- 2. Glaucomatous degeneration starts at the eyes and eventually spreads throughout the entire visual pathway, most likely through anterograde trans-synaptic degeneration. (this thesis)
- 3. There appears to be a time lag between the anterior and posterior visual pathway glaucomatous degeneration, and hence a time window within which posterior pathway fibers could be salvaged. (this thesis)
- 4. While glaucomatous degeneration affects the entire visual pathway, there is not enough evidence to claim that glaucoma affects areas of the brain that are not involved in vision. (this thesis)
- 5. Future glaucoma diagnostics and therapies should be developed with the entire visual pathway in mind. (this thesis)
- 6. Higher-order diffusion models are superior to the conventional tensor model in detecting and characterizing glaucomatous degeneration of visual pathway white matter, and could potentially be utilized as clinical tools complementary to the imaging of the retina and optic nerve head for assessing glaucoma. (this thesis)
- 7. After all, science is essentially international, and it is only through lack of a historical sense that national qualities have been attributed to it. (Marie Skłodowska Curie)
- 8. Science is magic that works. (Kurt Vonnegut)