

In conclusion, it has been proven that multiphoton microscopy is a powerful tool to image the multilayered structure of retinal tissues in animal models (such as chicken presented herein) which provides complementary information. In particular, since the density of different retinal cells can be computed, changes in retinal organization can be tracked and comparisons between myopic and emmetropic eyes might be carried out. In that sense, the still-open question on whether the ocular enlargement with myopia leads to a stretching of the tissue or new cells are generated in order to maintain a constant density of cells (number per unit area), might be unveiled by using these nonlinear imaging techniques.

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