

**The project title: „Xanthophylls in the Retina of the Eye”**

**Subvention: 3 265 068 PLN**

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A central goal of the project is to unveil molecular mechanisms associated with physiological activity of xanthophyll pigments, lutein, zeaxanthin and *meso*-zeaxanthin, concentrated in the yellow spot of the retina of the human eye, linked to etiology and prevention against AMD (age-related macular degeneration).

Advanced molecular spectroscopy and imaging techniques will be applied (e.g. Fluorescence Lifetime Imaging Microscopy, Raman Imaging) in studies of xanthophyll-containing model lipid membranes and natural membranes of the retina.