approach enables structural imaging of corneal stroma without any labeling and despite the vital movements.

This method opens avenues for preclinical ophthalmological studies, which require dynamic follow-up of corneal lamellar structure in a variety of injuries or pathologies. It should also find applications to *in vivo* diagnosis of human corneal dystrophies or to corneal healing monitoring after keratoplasty or refractive surgery. More generally, epi-detected polarization-resolved SHG imaging can provide quantitative structural information about the 3D organization of collagen fibrils within any tissue. We therefore expect that this new method will extend to other organs and become a new diagnosis tool for collagen remodeling.

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