

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: 3D scheme of setup for eye tracking and defocusing correction

File Name: Supplementary Movie 2

Description: 3D scheme of setup for eye tracking and defocusing correction (close view, optics only)

File Name: Supplementary Movie 3

Description: Tracking of OCT peaks, estimating corneal position and validating defocusing correction

File Name: Supplementary Movie 4

Description: Comparison of imaging steadily moving ex vivo cornea with and without defocusing correction

File Name: Supplementary Movie 5

Description: Imaging ex vivo cornea moved with natural frequencies of the eye

File Name: Supplementary Movie 6

Description: Real-time imaging of central human cornea in vivo (example 1)

File Name: Supplementary Movie 7

Description: Real-time imaging of central human cornea in vivo (example 2)

File Name: Supplementary Movie 8

Description: Real-time imaging of peripheral human cornea in vivo

File Name: Supplementary Movie 9

Description: Real-time imaging of limbal human cornea in vivo

File Name: Supplementary Movie 10

Description: Blink and tear flow

File Name: Supplementary Movie 11

Description: Movement of tear film caused by half-blink

File Name: Supplementary Movie 12

Description: Blood flow underneath Palisades of Vogt and tracking of blood cells