

**Supplemental Figure 1. Synthetic image generation** / **examples.** (A-H): Outline of synthetic data generation. (A) The position and orientation of the applanation circle is randomly determined. (B) The inner edge is randomly chosen for both the top and bottom half. (C) The background and applanator edge are colored in. (D) The mire position is randomly chosen and the mire and residual dye are colored in. (E) The mire and dye are shifted. (F) The positions of the prism wall are determined. (G) All remaining areas are colored in. (H) Gaussian noise is added and areas far from the applanator are darkened. For images without mires, (D-E) are skipped. All random parameters (including colors) are chosen from distributions that empirically match observed data. (I-L): Examples of synthetic images with circles segmented. Note that the ground truth is known exactly because it was determined during data generation.