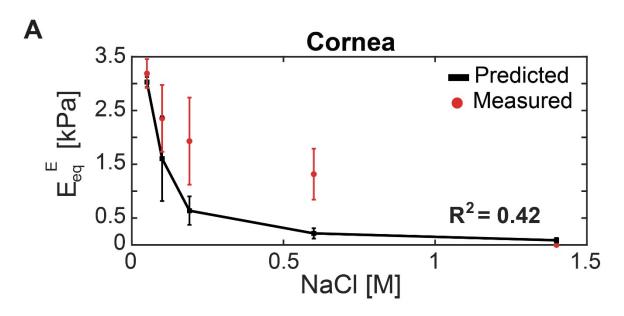
## 1 Supplemental Figures



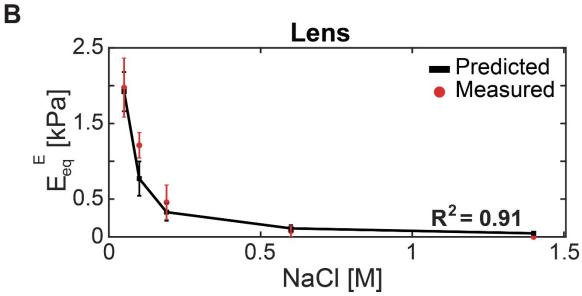
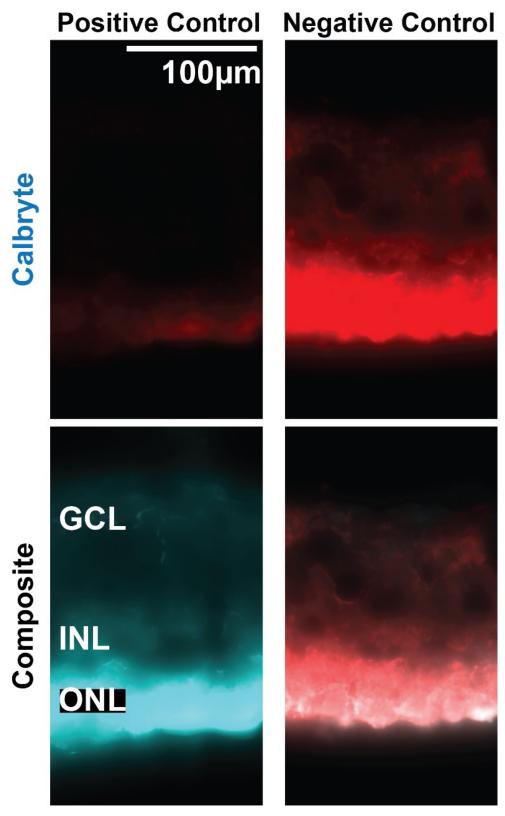


Figure S 1 Measured (red) and predicted (black) electrostatic component ( $E_{Eq}^{E}$ ) of the bulk modulus ( $E_{Eq}$ ) vs bath salinity. (A)  $E_{Eq}^{E}$  of 8 mm corneal explants had a poor fit to the Ideal Donnan model prediction curve. (B)  $E_{Eq}^{E}$  of lenses closely followed the Ideal Donnan model.



**Figure S 2** Representative images of positive and negative control tissues from live/dead assay. Calbryte AM (cyan) and Zombie Red (red) channels shown.