Abstract Submitted
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**An optical microscopy study of the swelling of wet-spun films of CsDNA as a function of hydration and CsCl concentration** MEGAN SCHWENKER, Univ. of Toledo, ROBERT MARLOWE, Univ. of Tennessee at Chattanooga, SCOTT LEE, Univ. of Toledo, ALLAN RUPPRECHT, Univ. of Stockholm — Highly oriented, wet-spun films of DNA expand in the direction perpendicular to the helical axis as the hydration of the film is increased. CsDNA films with a high CsCl content show an unexpected shrinkage at a relative humidity of 92%. Our most recent experiments have been to measure the perpendicular dimension of CsDNA as a function of both hydration and concentration of CsCl. Our preliminary results show that no shrinkage is observed at low contents of CsCl, showing that the CsCl plays an integral role in the shrinkage phenomenon.

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