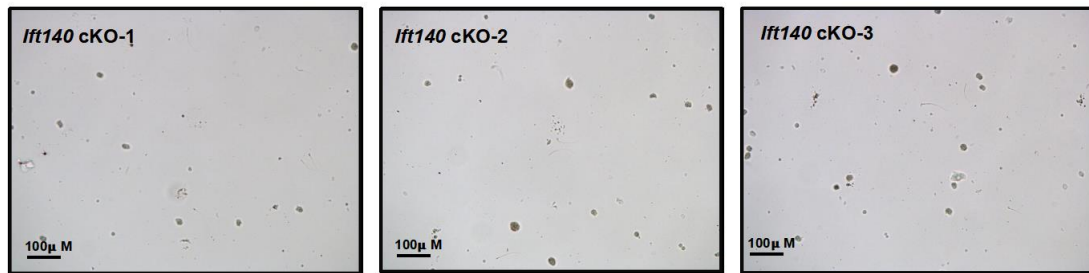
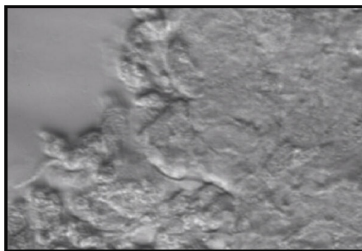


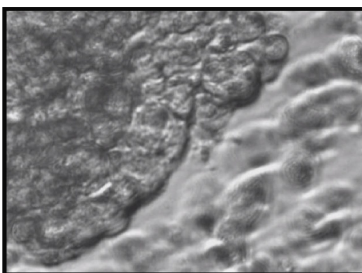
Supplemental movie 1. Representative movies of sperm from control mice.



Supplemental movie 2. Representative movies of sperm from *Ift140* cKO mice.



Supplemental movie 3. Representative movies of ciliary beating in tracheal epithelial cell cultures from a control mouse.



Supplemental movie 4. Representative movies of ciliary beating in tracheal epithelial cell cultures from an *Ift140* cKO mouse.

Irf140 forward: 5'- TCAGCCCTCTATGCCACTCT -3'
Irf140 reverse: 5'- CTTCCCTATGCCTTCAGCAG-3'

FOXJ1-Cre forward: 5'-GCAAAACAGGTAGTTATTCGG-3',
FOXJ1-Cre reverse: 5'-ATTTGGGCCAGCTAAACATGC-3'

Supplemental Table 1: Primers for genotyping the mice.