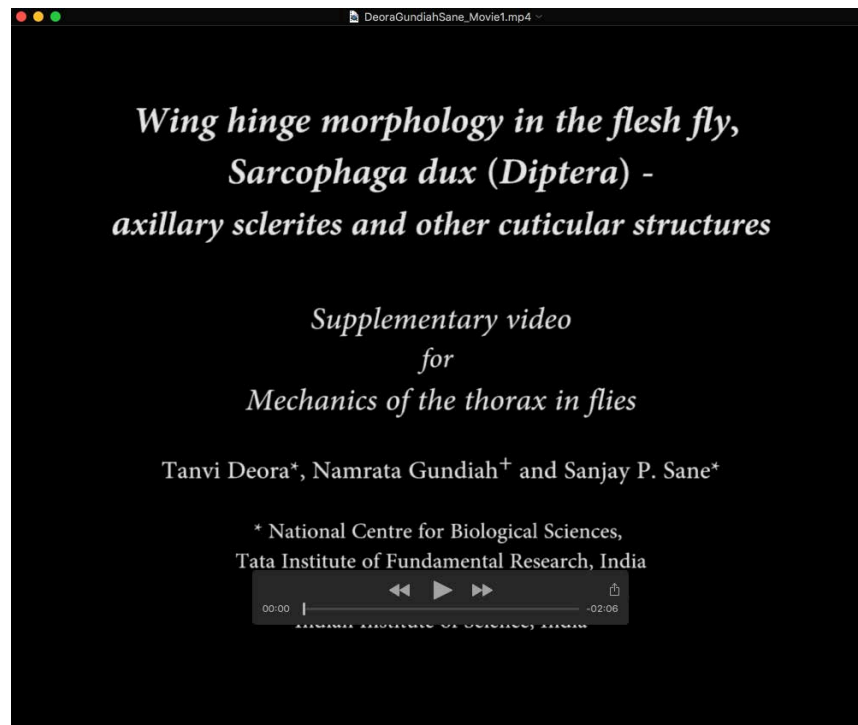


Supplementary Videos



Supplementary Movie 1: Wing hinge morphology in the flesh fly, *Sarcophaga dux* (Diptera) – axillary sclerites and other cuticular structures. This video shows the structures involved in transmitting forces from the power muscles to the wings using contrast-enhanced X-ray microtomography of a flesh fly thorax.



Supplementary Movie 2: Wing hinge morphology in the flesh fly, *Sarcophaga dux* (Diptera) – steering muscles and associated sclerites. This video shows all the steering muscles responsible for fine kinematic control of wing strokes using contrast enhanced X-ray microtomography of a flesh fly thorax.