

Figure S1. Transmission electron microscopy images of ultra-thin sections of Chinese Spring wheat anthers varying in length from 0.5 to 1.4 mm (A) Cross section showing the multiple layers of anther tissue (B) Tapetal and meiotic cells are shown for comparison and (C) **M**eiotic nuclei of the corresponding anthers are shown wherever possible. The images are captured at different magnifications to show changes in anther anatomy throughout the meiotic progression. Scale bar = $50 \, \mu m$.