



**Figure S1. Segmentation of a cell family.** A cell family tracked through a 48 h time-lapse of digital holographic imaging. Semi-automatic cell identification has been applied and the images have been analyzed for cell divisions. The images show: At 0 h the rounded-up mother cell ready for cell division, at 17 h the daughter cells shortly after the first cell division, at 22 h just before the first daughter cell division. The left cell is preparing for a division. At 28 h the cells shortly after the second daughter cell division and at 48 hours after the next rounds of division where all granddaughter cells have divided. Images have been reconstructed in App Suite.