

## **Calculation of cell number based on cell optical density (OD<sub>600</sub>)** (submitted jointly by Joanna Kufel's and Jean Beggs' groups)

### **Method developed specifically for this project.**

1. Cells for each yeast strain were grown in chosen media (YPD, SC etc) until cells reach OD<sub>600</sub> of 0.1, 0.15, 0.2, 0.25, 0.3, 0.35, 0.4, and 0.5.
2. Cell number per ml of culture was calculated using a CASY<sup>®</sup> 1 Cell Counter, Scharfe System (Germany) or a Nucleocounter (New Brunswick Scientific) according to the manufacturers' instructions or using a CHEMACYTOMETER (Thomm's chamber).
3. A standard curve relating cell OD<sub>600</sub> for each strain and cell number was generated in Excel and used for all future applications requiring generation of steady-state and kinetics values per cell.