

A. Elongation rate (old-pole mother cell)

| Exp \ Stat | Avg (1/mins) | Var (1/mins) | # cells |
|-------------|--------------|--------------|---------|
| B/r Exp1 | 0.043 | 0.003 | 1008 |
| B/r Exp2 | 0.044 | 0.006 | 16585 |
| MG1655 Exp1 | 0.044 | 0.004 | 11412 |
| MG1655 Exp2 | 0.044 | 0.005 | 3650 |
| MG1655 Exp3 | 0.046 | 0.005 | 3005 |
| MG1655 Exp4 | 0.045 | 0.006 | 20961 |
| MG1655 Exp5 | 0.045 | 0.005 | 22959 |

B. Elongation rate (young-pole daughter cell)

| Exp \ Stat | Avg (1/mins) | Var (1/mins) | # cells |
|-------------|--------------|--------------|---------|
| B/r Exp1 | 0.043 | 0.004 | 1008 |
| B/r Exp2 | 0.044 | 0.004 | 16585 |
| MG1655 Exp1 | 0.046 | 0.004 | 11412 |
| MG1655 Exp2 | 0.045 | 0.003 | 3650 |
| MG1655 Exp3 | 0.047 | 0.004 | 3005 |
| MG1655 Exp4 | 0.046 | 0.005 | 20961 |
| MG1655 Exp5 | 0.046 | 0.007 | 22959 |

C. Generation time (old-pole mother cell)

| Exp \ Stat | Avg (mins) | Var (mins) | # cells |
|-------------|------------|------------|---------|
| B/r Exp1 | 23.4 | 4.8 | 1008 |
| B/r Exp2 | 22.8 | 4.8 | 16585 |
| MG1655 Exp1 | 21.4 | 5 | 11412 |
| MG1655 Exp2 | 21.4 | 5.7 | 3650 |
| MG1655 Exp3 | 20.8 | 5.9 | 3005 |
| MG1655 Exp4 | 20.3 | 5.3 | 20961 |
| MG1655 Exp5 | 21.4 | 5.4 | 22959 |

D. Generation time (young-pole daughter cell)

| Exp \ Stat | Avg (mins) | Var (mins) | # cells |
|-------------|------------|------------|---------|
| B/r Exp1 | 22.8 | 4.7 | 1008 |
| B/r Exp2 | 21.4 | 4.7 | 16585 |
| MG1655 Exp1 | 21 | 4.9 | 11412 |
| MG1655 Exp2 | 20.8 | 5.5 | 3650 |
| MG1655 Exp3 | 20.4 | 5.1 | 3005 |
| MG1655 Exp4 | 18.1 | 5.7 | 20961 |
| MG1655 Exp5 | 20.4 | 5 | 22959 |

E. Newborn cell size (old-pole mother cell)

| Exp \ Stat | Avg (μm) | Var (μm) | # cells |
|-------------|-----------------------|-----------------------|---------|
| B/r Exp1 | 3.3 | 0.6 | 1008 |
| B/r Exp2 | 3.3 | 1.1 | 16585 |
| MG1655 Exp1 | 3.6 | 1 | 11412 |
| MG1655 Exp2 | 4.1 | 1.3 | 3650 |
| MG1655 Exp3 | 3.9 | 1.2 | 3005 |
| MG1655 Exp4 | 3.8 | 1 | 20961 |
| MG1655 Exp5 | 3.9 | 1.1 | 22959 |

F. Newborn cell size (young-pole daughter cell)

| Exp \ Stat | Avg (μm) | Var (μm) | # cells |
|-------------|-----------------------|-----------------------|---------|
| B/r Exp1 | 3.3 | 0.6 | 1008 |
| B/r Exp2 | 3.3 | 0.7 | 16585 |
| MG1655 Exp1 | 3.4 | 0.8 | 11412 |
| MG1655 Exp2 | 3.8 | 1 | 3650 |
| MG1655 Exp3 | 3.7 | 0.9 | 3005 |
| MG1655 Exp4 | 3.6 | 0.8 | 20961 |
| MG1655 Exp5 | 3.7 | 0.9 | 22959 |

Table of statistics of growth. (avg = average, var = variance) **(a, b)** elongation rate **(c, d)** generation time **(e, f)** newborn cell size