Sequential closure of the cytoplasm then periplasm during cell division in *Escherichia coli*

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**Keywords:** cell division, *Escherichia coli*, periplasm, FRAP

**Abstract**

While the sequential assembly of the components (a protein complex known as the divisome) required for cell division in *E. coli* is well studied the actual initiation of the constriction of the septum is not. Our initial data indicates that the whole divisome has to be assembled before the constriction starts which is in line with the idea that the divisome is not stable until FtsN, the last known protein to be recruited to the complex [1].

As a step in the way we intended to visualize the latter stages of the cell division in live *Escherichia coli* (*E. coli*). We have carried out Fluorescence Recovery After Photobleaching (FRAP) on a large number of cells expressing cytoplasmic GFP and periplasmic mCherry. Our data show conclusively, that the cytoplasm is sealed prior to the periplasm during the division event [2].

References:
