



Figure 1. Life Cycle of the Fission Yeast, *S. pombe*

Fission yeast has a short G₁ taking less than 10% of the cell cycle (stippled area is expanded to aid representation). In rich medium, G₁ cells proceed into S phase followed by a long G₂ (~70% of the cell cycle), mitosis, and cytokinesis. When starved of nitrogen, cells of opposite mating type (+ and -) conjugate, after which nuclei fuse in a process known as karyogamy. Premeiotic replication and recombination allow meiosis I and II to proceed, resulting in four haploid nuclei that are separated into four spores in an ascus. Provision of rich medium allows germination of spores and resumption of the vegetative cell cycle.