

Cell polarity can be defined as an asymmetric organization and distribution of biomolecules, cellular organelles and structures which are important for many cellular processes. Cell polarity establishment is essential for the proper development of all organisms. This work focuses on main mechanisms of cell polarity establishment, its maintenance and changes during *Saccharomyces cerevisiae* cell cycle. Budding yeast is one of the preferred model organism. Bud site selection is determined by the spatial landmarks which are accumulated at the previous division site. The spatial landmarks are recognized by Rho GTPases which act on their effectors and thus affect the actin cytoskeleton and septins. These structures are essential for polarized bud growth that is coordinated with the cell cycle. Newborn cells arising after the bud separation from the mother cell at the end of each cycle are able to undergo many more division cycles than their mothers what is a new challenge to study cell polarity in terms of cell aging.