Cell and Molecular Biology

Cell and Molecular Biology studies the structure and function of the cell, which is the basic unit of life. Cell biology is concerned with the physiological properties, metabolic processes, signaling pathways, life cycle, chemical composition and interactions of the cell with their environment. This is done both on a microscopic and molecular level as it encompasses prokaryotic cells and eukaryotic cells. Knowing the components of cells and how cells work is fundamental to all biological sciences; it is also essential for research in bio-medical fields such as cancer, and other diseases. Research in cell biology is closely related to genetics, biochemistry, molecular biology, immunology and cytochemistry.

Book: Cells - Molecules and Mechanisms (Wong)
Book: Basic Cell and Molecular Biology (Bergstrom)

Book: Investigations in Molecular Cell Biology (O'Connor)

Thumbnail: A diagram of a typical prokaryotic cell. Image used with permission (Public Domain; Mariana Ruiz Villarreal, LadyofHats).