

# Molecular and Cell Biology (I)

Spring, 2008

## Textbook

*The World of the Cell* (edited by Wayne M. Becker, Lewis J. Kleinsmith, Jeff Hardin, Benjamin Cummings, 6 edition, 2006)

焦傳金 (6 weeks)

- Chapter 1 A preview of the cell (also Appendix “principles and techniques of microscopy”)
- Chapter 4 Cells and organelles
- Chapter 15 Cytoskeleton systems
- Chapter 16 Cellular movement: motility and contractility
- Chapter 17 Beyond the cell: extracellular structures, cell adhesion, and cell junctions

傅化文 (6 weeks)

- Chapter 2 The chemistry of the cell
- Chapter 7 Membranes: their structure, function, and chemistry
- Chapter 12 Intracellular components: the endoplasmic reticulum, Golgi complex, endosomes, lysosomes, and peroxisomes

葉世榮 (6 weeks)

- Chapter 8 Transport across membranes: overcoming the permeability barrier
- Chapter 13 Signal transduction mechanisms: I. electrical signals in nerve cells