Chapter 4 Web Links

Dennis Kunkel Microscopy and Stock Photography Image Page
An online collection of micrographs that are works of art. Various insects, bacteria, and other organisms are featured.

Nanoworld Image Gallery
The Centre for Microscopy and Microanalysis at the University of Queensland has compiled a gallery of transmission and scanning electron microscope micrographs. You can browse various types of cells, tissues, and crystals. These images are excellent for class studies and project resources.

Virtual Cell
A series of still images, texts, and movies portray the structure and function of a generic plant cell, as students navigate their way through it. For example, removing the cell wall and then the plasma membrane provides a view of internal organelles. Clicking on the chloroplast brings up an inside view, then closeups of grana, then photosystems. At each step, a short, simply worded paragraph, often posing questions, describes the structure and how it works.

Cell Biology Topics
Links to images and descriptions of organelles.

Mitochondria Movies
Three-dimensional images of mitochondria.

A Typical Plant Cell
A sketch of a plant cell. Click on an organelle for a brief description of its function.

Ribosome Image
A colorized three-dimensional ribosome image.

Prokaryotes, Eukaryotes, & Viruses Tutorial
This is a well-written tutorial that will help you to learn about the structures of prokaryotic and eukaryotic cells.

Cytoskeleton Tutorial
This tutorial will help you understand microtubules, microfilaments, and intermediate filaments, and their roles in cell movement.

Scanning Electron Microscope
An assortment of SEM imagesÑnot quite relevant to this chapter, but really nice to look at.

Cells Alive!
The famous cell site. Learn about various types of cells and the relative sizes of different cell types; view the cell image gallery and more.

The Virtual Cell Textbook: Cell Biology
Illustrations and brief descriptions of many cell organelles.

Ribosomes Revealed
The *Scientific American* story of how a detailed image of a ribosome was obtained.

Cellular Organelles
Descriptions of the functions of many cellular organelles.

An Electron Microscopic View of Membranes
Illustrations of tight junctions, gap junctions, and other cell membrane specializations.

Online Service for Cell Biology
Click on the British flag for an English version of this German website that includes photos, videos, and 3-D animations of cells. On the left navbar, click the Search button, then click on the Sitemap link to access animations and discussions of cells and their organelles.

Animal Cells
From this illustration of an animal cell, you can follow links to a discussion of organelle function.

Cell Structure and Processes
Very basic explanations of cell structures and function.