
Further Readings for Ch. 15

- Ezzell, C. December 2001. Stem cell showstoppers. *Scientific American* 286(5):27. Article discusses problems that have risen in stem cell research.
- Friedmann, T. et. al. June 1997. Making Gene Therapy Work. *Scientific American* 276(6):95. Article discusses the obstacles that must still be overcome before gene therapy is ready for widespread use.
- Friend, S. and Stoughton R. February 2002. The magic of microarrays. *Scientific American* 286(2):44. DNA microarray tools are clarifying the molecular roots of health and disease and speeding drug discovery.
- Garnick, M. B., and Fair, W. R. December 1998. Combating prostate cancer. *Scientific American* 279(6):74. Article details the recent developments in diagnosis and treatment of prostate cancer.
- Gibbs, W. W. February 2001. Biological alchemy. *Scientific American* 284(2):16. The discovery that skin and bone marrow cells can transform into neurons raises hopes as well as many questions.
- Glausiusz, J. May 1998. The great gene escape. *Discover* 19(5):90. Genes from genetically engineered plants can escape from crops into the wild, causing resistance in the wild plant.
- Martindale, D. October 2001. Genes are not enough. *Scientific American* 285(4):22. Switching genes on and off sometimes depends on the addition of methyl groups to DNA.
- Martindale, D. December 2000. Muscling DNA. *Scientific American* 283(6):34. A muscle inside the cell nucleus is responsible for moving long stretches of DNA through enzymes that translate the genetic code into RNA.
- Mirsky, S. Sticky situation. August 2001. *Scientific American* 285(2):22. The great hope for curing sickle-cell disease continues to be gene therapy. Another important aspect of the disease has been found—a protein is largely responsible for the cellular stickiness.
- Mooney, D. , et. al. April 1999. The promise of tissue engineering. *Scientific American* 280(4):59. Several articles discuss stem cell research, growing new organs, and related challenges.
- Moxon, E. R., and Wills, C. January 1999. DNA microsatellites: Agents of evolution? *Scientific American* 280(1):94. Repetitive DNA sequences may determine how an organism, such as a bacterium, adapts to its environment.
- Scientific American* Special Issue. 275(3). September 1996. What you need to know about cancer. The entire issue is devoted to the causes, prevention, and early detection of cancer, and cancer therapies—conventional and future.
- Weiner, D. B. and Kennedy R. C. July 1999. Genetic vaccines. *Scientific American* 281(1):50. Bits of DNA or RNA, if introduced into cells, can stimulate powerful immune responses against viruses, bacteria, and some cancers. These techniques could be used as genetic vaccines.