1	And that is the source of their power. A decade ago research on lab animals revealed that stem cells taken from animal embryos are astoundingly versatile. They grow in the lab, proliferate like rabbits and turn into specialized cells such as neurons. But no one has turned the same trick with human cells. Begley, S. (2001). Cellular divide. *Newsweek,* July 9, 2001, p. 22 – 27.

2	To opponents of using embryos, this ends the debate. Why "kill anybody," as Sen. Sam Brownback put it, referring to stem cells from IVF embryos, when you can instead tap into willing adults with hardly more fuss than drawing blood? But adult stem cells may not live up to their name. They seem to proliferate more slowly than the embryonic ones, and so might not provide an ever–renewing source of new cells to replace those lost to, say, arthritis. Begley, S. (2001). Cellular divide. *Newsweek,* July 9, 2001, p. 22 – 27.

3	The Gulf seems to be headed for the same problems that are obvious in the Chesapeake, but on a larger scale. Fed by chemical runoff, algal blooms have spread, causing ever−enlarging, oxygen−depleted dead zones. And jellyfish are proliferating, both a native species and a gigantic Pacific species. Researchers believe the swollen jellyfish population could have a devastating effect on Gulf fishing because they attack the eggs and larvae of many species. Monty Graham, senior marine scientist at the Dauphin Island Sea Lab in Alabama, says overfishing, "including aggressive menhaden fishing," seems to have allowed the jellyfish−"an opportunistic planktivore"−to fill the ecological void. He says the proliferation of both species of jellyfish indicates "something gone wrong with the ecology." Franklin, H.B. (2001). The most important fish in the sea. *Discover*, September 2001, p. 44−51.

4	Cancer, in the broadest sense, is uncontrolled cell growth. DNA replicates and cells proliferate widely, depriving more organized growth of needed resources. Tumorous growths can appear as amorphous, undifferentiated, and ungovernable masses. Yet despite giving the appearance of complete disarray, cancer can be the end result of just a few molecular events gone wrong. (2000). A positron named Priscilla: Scientific discovery at the Frontier. National Academy of Sciences.

5	Post–farm food processing, storage, and improper handling and cooking are major contributors to the chain of events that allows the pathogen to contaminate the product, proliferate on or in the food, and attain the large numbers that cause disease. Board on Agriculture (1999). The use of drugs in food animals: Benefits and risks. National Academy Press.

6	Both the Internet and information infrastructure generally are fundamentally international. The international nature of infrastructure will have to be addressed in whatever technical, market, and legal measures are taken to assure smooth communication and interaction between most countries. International connectivity must be maintained and expanded as foreign networks develop and proliferate. Computer Science and Telecommunications Board. (1994). Realizing the information future. National Academy Press, p. 7.

7	In MS [multiple schlerosis] patients, levels in cerebrospinal fluid of the type of protein known to consist of antibodies (immunoglobulin) are often higher than in healthy people. The increased immunoglobulin is due to production by only a few different clones of B cells that have been induced to proliferate. Institute of Medicine (2001). Multiple Schlerosis: Current status and strategies for the future, p. 74.

8	the establishment of nonindigenous [not native to the region] anthropods has often been attributed to their escape from natural enemies in their native habitats. However, knowing whether resident enemies in a newly colonized habitat will attack a nonindigenous anthropod and limit its demoraphic growth or spread is important if we wish to predict which immigrants will not only establish, but also proliferate and spread. Board on Agriculture (2002). Predicting invasions of noindigenous plants and plant pests. National Academy Press, p. 71.

9	It would be more fruitful to focus on resource availability and how variation in limiting resources may foster or hinder the invasion process. Invasions of communities probably include both cases in which resources are usurped by an invader at the expense of natives and cases in which unused or underused resources are commandeered. Yellowstar thistle, for example, is able to thrive with minimal water resources in the annual grasslands in California's Central Valley. Invasive nitrogen–fixing species have proliferated in habitats where there apparently were few native nitrogen–fixers or where nitrogen–fixers operated weakly. Board on Agriculture (2002). Predicting invasions of noindigenous plants and plant pests. National Academy Press, p. 77.

10	Once established, some invaders can usurp resources in a new range, use them more efficiently than the natives, or even alter the resources themselves. In many invasive species, these competitive traits are revealed as the organism begins to proliferate. Evidence of interspecific competition exerting strong effects on newly established insects or pathogens is scarce, but competition often plays a substantial role in plant invasions. Board on Agriculture (2002). Predicting invasions of noindigenous plants and plant pests. National Academy Press, p. 78.

11	Sleeper species are species whose populations appear to remain in a quiescent phase for long periods before they begin to proliferate. The current range expansion and proliferation of rocket (hesperis matronalis) might qualify it for inclusion in this category. It was introduced early in the 19th century in the United States. It apparently became naturalized soon after arrival, but its numbers did not increase noticeably. In the last 10 years in eastern Washington, what had once been small isolated populations of the species are clearly becoming more abundant, and the individual populations are growing. Board on Agriculture (2002). Predicting invasions of nonindigenous plants and plant pests. National Academy Press, p. 82.