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Biology: Diseases and Cures

Biology Team One
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Reading List

Jan 5-11
10. Stem Cells Step in to Save Bone Marrow Patients [½]
10. Teenage Smokers Face Badly Wired Brains [½]
11. Mysterious Death Reignites vCJD Fears [½]
11. Fresh Hope for Emergency Blood Substitutes [½]
13. Flu Deaths are a Family Matter [½]
16. Drugs Win Prizes [½]
16. Paying for Drugs [½]

Jan 19-25
6. No Wonder Drug [½]
7. Dying Denied Trial Drugs [½]
12. Should Europe Ease up on BSE Tests? [½]
13. Simple Protein Helps Human Embryonic Cells to Thrive [½]
16. Rogue Stem Cells Hold Clue to Slowing Melanoma [½]

Jan 26-Feb 1
5. Natural Does Not Mean Harmless [ ½ ]
7. Any Kidney Will Do [ ½ ]
8. From a City’s Arteries into Ours [1½]
14. The Secret to a Long Life is a Family Affair [ ½ ]
16. When More Morphine Means Feeling More Pain [ ½ ]
18. Eat Less, Live Long [ ½ ]
19. 1918 Flue Pandemic Had Trial Run [ ½ ]
19. Pregnancy and Caffeine Don’t Mix [ ½ ]
24. Stem Cell Prospects [ ½ ]
37. Hard to Swallow [3]
52. Marvellous Mithridatum [2]

Introduction to the Discussion

Since the beginning of time, the threat of diseases has been known to have a great impact in societies and devastating results on humanity. One disease has the potential to kill hundreds of thousands of people, leaving scientists searching for a cure. The development
of medicine has allowed for doctors and researches to make discoveries of the human body and create cures to rid human of all types of illnesses.

As science and medicine have progressed, so has the development of diseases that continue to affect our society. Continuous research of drug abuse has resulted in unpredicted findings of horrific affects on the mind and body, and has led researchers to correlate specific drugs to the dysfunction of various organs within the body. Also, analysis of the flu has allowed for the understanding of its infectious patterns, which can greatly help in diagnosis and treatment. How do medical researchers keep up with the increasing amount of scientific discoveries?

Medicine has vastly expanded, while scientists make new findings every day to face diseases and infections. Drugs and treatments are introduced to temporarily reduce symptoms and pain, while cures are in the process of discovery. Organ transplants, stem cells, and vaccinations are largely used today to subdue the intensity of an illness. However, do all drugs act in the benefit of the patient? Although science may appear to have the individual’s best interest in mind, recently scientists have used their research to manipulate innocent people. How should research be controlled? It is obvious that drugs and research are necessary to understand disease, and find cures to cease its existence. How far should science be able to go? And should treatment and research be regulated? To what extent should this regulation occur?

**Connections to LBS 133**

Diseases and their cures seem to be a common topic in LBS 133. For example, in *Day of the Triffids*, the world faces a mysterious plague that kills many blind and seeing people. This greatly resembles this situation outline in the article *Mysterious Death Reignites vCJD Fears*. A couple of people have died so far from a disease and scientists do not know whether it is a new form of vCJD or a sporadic form of CJD. Additionally, in *Breakthrough of the Year*, the second runner up is about the discovery and creation of induced pluripotent stem (iPS) cells. This discovery greatly relates to all the articles in *New Scientist* about stem cells. In LBS 133, many of the resources read discuss diseases and cures.

**Hot Jobs**

Clinician-Infectious Diseases Multiple Positions (D4/D5) with Pfizer Connecticut, US (1/26, p. 59)

Research Associate-Drug Discovery with Myriad Genetics Inc.-Myriad, UT-(1/26, p. 61)

The William and Joy Harbert Endowed Chair in Cancer Genetics with University of Alabama at Birmingham (UAB) (1/5, p. 46)
Potential Quiz Questions

1. Without the aid of research, the continuous discovery of medicine and cures would be impossible. What role should the government play in medical research?

2. How should stem cells be regulated within medicine?

3. Medicine holds great power over those stricken with disease and knowing so, scientists can easily manipulate the sick. What should be done to avoid this from happening?