**The Price to Be Paid For the Next Scientific Revolution**

As we close the 21st century, science is rushing headlong into the future and the brakes seem unable to bring it to a stop. In the past, a senior advisor to the President of the United States spent most of his days keeping the President abreast of economic and domestic policy. Today, however, it has become apparent that we are truly heading into a new Scientific Revolution, where there are people who believe that the saying "In God We Trust," means to trust in themselves. The key way to legislate the Scientific Revolution seems to be to know when science steps over the line and threatens to ethically destroy the fabric of our society.

The President has asked you to test the waters of this new science and evaluate what stance he needs to take regarding issues like cloning, cryogenics, assisted suicide, etc... In order to stay in office, the President knows that he must define his beliefs and find a way to mesh them with those of the public. It was suggested that you research the first Scientific Revolution of the past, and examine the people, the issues they dealt with, and the eventual outcomes of the scientists during that period. Once you have been able to gather some background, you need to put together a plan for the President to follow regarding the pressing scientific issues of today. Doing a good job on this issue will not guarantee a great future for the President, but doing a bad job will certainly doom it.



**The Task**

As a Senior Advisor, you have the staff and resources available to gather information necessary to advise the President. As you look at the past, try and focus on scientists like Galileo and Edward Jenner, as both were viewed initially with skepticism and yet won out against considerable odds. You will help your research along by focusing your work on these questions:

* Did the scientists of the past act ethically as they pursued their goals?
* What were some of the risks undertaken by early scientists?
* What was the societal climate like for early scientists?
* Did the idea of ethics play a role in their scientific discoveries?
* In the process of trying to save lives, was the work of scientists like Jenner ethical?

Once you have established an understanding of the early scientific work, you need to apply what you have learned about the past to modern science, and the future of science. Remember it is your job to provide a path for the President to follow, so that he can feel confident in taking sides in an issue conscious society.

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**The Process**

When you and your group work on this project it is important to remember that you will be forming presidential opinions, as he does not have the time available to study every issue that besets the office of the President. You will be preparing both a written and an oral report to the President, so you need to make sure that you are thorough in all that you do. You and your team have the opportunity to set the course of the United States for the foreseeable future and it is a job not to be taken lightly. Within both your oral and written reports you need to provide options for the President and the possible benefits and consequences that each will bring about. It is a brave new world when it comes to science, and the U.S. is, and should remain, at the forefront.

**Resources**

Edward Jenner's Story

<http://ma.essortment.com/smallpoxvaccine_rchc.htm>

Cloning and Much More!

<http://www.ornl.gov/sci/techresources/Human_Genome/elsi/cloning.shtml>

Information on Galileo

<http://galileo.rice.edu/>

Cryogenics or Cryonics page

<http://www.merkle.com/cryo/>



**Learning Advice**

You must remember the seriousness of the task you are undertaking. As an advisor, it is your job to wade through all of the available material and provide the President with precise and concise information.

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**Evaluation**

You will be evaluated on the quality and the quantity of your written and oral reports. As it is your job to provide advice to the President, it is the quality of that advice that you will be assessed on the most.

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**Conclusion**

Now that you have finished with the majority of your work, it is time for a little reflection. In addition to the previously mentioned activities, answer these questions.

1. What is your opinion regarding the new Scientific Revolution? Do we as a society have anything to fear from these new discoveries such as cloning and cryogenics?

2. Should there be any ethical guidelines regarding new scientific discoveries or should we just let science go unchecked and deal with the problems as they arise?