

Sample Preparation Outline on "CRYONICS" *

Specific Purpose: To inform my audience about the history, methods, and future of cryonics.

Central Idea: Although cryonics has moved in recent years from science fiction to scientific reality, it is still far from foolproof.

Introduction

- I. Imagine the following scenes.
 - A. Your mother or father has suffered a heart attack.
 - B. Your grandmother or grandfather lies near death in their nursing home.
 - C. Your best friend is in the hospital with a massive system-wide infection.
- II. For most people, these circumstances would herald the end of life.
- III. But all of you may be able to meet again the future through the process of cryonics.
- IV. Cryonics is the process of freezing people in the hope that medical science will be able to revive them in the future.
- V. Intrigued by the subject, I have read dozens of newspaper and magazine articles about it.
- VI. Although cryonics has moved in recent years from science fiction to scientific reality, it is still far from foolproof.

(Preview-Transition: I would like to give you a brief overview of the history, methods, and future of cryonics. Let's start with the development of cryonics.

Body

- I. Cryonics has a very interesting history.
 - A. The notion of preserving people after death is age-old.
 1. 1770s Ben Franklin quote about being immersed in a cask of wine
 2. featured in science fiction novels, movies, etc
 - B. Cryonics remained firmly in the realm of science fiction until 1964.
 1. Robert Ettingers *The Prospect of Immortality*
 2. James H., Bedford became the first person to be frozen in 1967.
 - C. Since then cryonics has steadily increased in popularity.
 1. four cryonics institutions in the United States
 2. 80 people have been cryogenically frozen
 3. 800 people have signed up to be frozen

(Transition: You're probably wondering how will they do it? How does cryonics work?)

- II. When a person who has signed up to be cryogenically frozen dies, a specific procedure must be carried out.
 - A. The person must decide whether to freeze the entire body or just the head.
 - B. If the whole body will be frozen, it must be preserved.
 1. after death, patient connected to heart machine
 2. chemicals are circulated
 3. Cold packs are used to reduce temp
 - C. If only the head will be frozen, a different procedure is followed.
 1. surgically detached and preserved

- 2. why ?
 - a. if body is in poor condition because of disease
 - b. head is preserved so science can create a new body in the future
- D. Once the head or body is ready for freezing, the rest of the process takes place.
 - 1. Cryoprotectants are circulated
 - 2. over 20 days body/head is cooled to 320 degrees Fahrenheit
 - a. patient is stored in a steel cylinder of liquid nitro
 - b. *Omni* quote: "At this temperature, biological function ceases and the patient will remain unchanged for hundreds of years." (Internal summary: Now that we have explored the development of cryonics and how the freezing process works, you may wonder how much it costs and whether the people that are frozen can be re-thawed.)

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- III. Two major issues in the future of cryonics are its high cost and the need to perfect the freezing and re-thawing process.
 - A. The cost of cryonics suspension ranges from \$60,000 to \$125,000.
 - 1. can be paid with life insurance policy
 - 2. quote from one member: "Facing my own mortality turned out to be much harder than coming up with the cash to pay for life insurance premiums."
 - B. The details involved in freezing and re-thawing have yet to be fully worked out.
 - 1. As explained in *New Science*, the freezing process inflicts a crippling amount of cellular damage.
 - a. only a few types of human tissue can be successfully thawed
 - b. not possible to freeze/rethaw complicated organs even
 - 2. Scientists are working on ways to reduce damage caused by freezing
 - a. research better cryoprotectorants
 - b. developing microscopic machines to repair cells

Conclusion

- I. You've heard about the history, methods and future of cryonics, which has become much more than a plot in a science fiction novel
 - A. 80 people have already been frozen and hundreds more have signed up.
 - B. If scientists can figure out how to re-thaw people successfully, cryonics will become more popular.
- II. So think again of your mother or father suffering a heart attack, your grandmother or grandfather dying of pneumonia, or your close friend being stricken with AIDS.

Bibliography

(See handouts on how to put together a bibliography)

* (Adapted from a sample outline in Stephen E. Lucas' *The Art of Public Speaking*.)