

OFFICIAL ABSTRACT

Title:

Student Name:

School Name and County:

Abstract (250 word limit):

1. As a part of this research project, the student will directly handle, manipulate, or interact with (check ALL that apply):

- Vertebrate animals***
*** *Must be 18 or older to participate in Animal Testing per IACUC policy.*
- Potentially hazardous biological agents
- Microorganisms
- rDNA
- Tissue

2. This project is a continuation of previous research.

Yes No

3. I hereby certify that the abstract and responses to the above statements are correct and properly reflect my own work.

Yes No

By typing your name in the box above, you acknowledge that the responses in this abstract are accurate and truthful.

COMPLETING THE ABSTRACT

Abstracts are limited to a maximum of 250 words and must fit within the predefined area. Your abstract should include these key components:

- 1. Scientific question.** Using your reading about the research from one of the Mayo Clinic scientists, identify and formulate a question that you wish to answer.
- 2. Hypothesis.** From your question, you can form a hypothesis, which is something that you expect to be true or not true.
- 3. Design experiment(s).** Based on your hypothesis, you can propose one to three experiments to prove or disprove your hypothesis.
- 4. State expected results.** Write what you expect to discover through performing your experiments.
- 5. Impact.** Explain the importance of your discovery.

SAMPLE ABSTRACT

Researchers in the lab work with a compound called SSI-4, which was invented in that lab. It has been shown to have broad anti-tumor activity against several different cancers. The ability of SSI-4 to inhibit cancer cell growth has been demonstrated in breast, ovarian, prostate, bladder and liver cancers, and melanoma. Thus far, the lab has not examined the effects of SSI-4 in brain cancer, lymphoma, head and neck cancer, uterine cancer, gastric cancer, colon cancer or lung cancer.

Question: Does SSI-4 inhibit cell proliferation in lung cancer?

Hypothesis: SSI-4 inhibits cell proliferation in lung cancer.

Experiment(s): Three lung cancer cell lines will be treated with SSI-4 over three days, and the number of cells will be counted and compared to control untreated cells.

Expected results: From data reported in the literature, it is expected that SSI-4 will inhibit cancer cell growth. Also, from data in publications, affected cells are expected to die through a programmed cell death mechanism called apoptosis.

Impact or importance of my study: Data may lead to further studies proving that SSI-4 inhibits tumor growth in lung cancer and may lead to a clinical trial in cancer patients diagnosed with lung cancer. This may prove to be an effective treatment for patients diagnosed with lung cancer.