

# Cancer Education Project Abstracts



## Stem Cells and Cancer

This series of activities is designed to introduce students to the theory that some cancers arise from cancer stem cells. This theory provides a possible explanation for why cancers reoccur after cancer treatment and provides insights that may lead to new types of chemotherapy drugs.

- **Part 1: Stem Cells and Cancer PowerPoint**

Students view a PowerPoint presentation that introduces stem cell biology and shows ways that cancer stem cell research might lead to more effective cancer therapy treatments. Students answer questions as they view the PowerPoint. Then they create a cartoon strip to illustrate their understanding of cancer stem cells.

- **Part 2: The Bad Seed: Rare stem cells appear to drive cancers**

Students read and answer questions based on a brief article that introduces stem cell biology and explains how cancer stem cell research might lead to more effective cancer therapy treatments. Students answer questions based on this article.

- **Part 3: Plant Derivative Attacks the Roots of Leukemia**

Students read and answer questions based on a brief article on the development of a potential chemotherapy agent that specifically targets cancer stem cells. Students answer questions based on this article.

- **Part 4: Clinical Trials: Parthocet**

Students answer questions that guide their design of a large-scale, randomized, double-blind clinical trial to determine if Parthocet (a fictitious chemotherapy drug) is safe and effective.