Example of a Lay Description

a. **Purpose of the study:** This study is used to test human bone material to see how well it might stimulate new bone growth in mice.

b. **What will be done to the animals:** Surgery is performed on the animals under general anesthesia. The animals used in this study have 2 small capsules placed in pockets between 2 thigh muscles, one capsule will be implanted in each thigh. The tiny incision and implant causes very minor distress in the animals. Pain killers are provided to all animals after the surgeries. By the second day after surgery, the animals are usually walking freely and easily. The surgery does not affect their ability to eat or function properly. One group of animals will survive the surgery for 35 days and the second group for 56 days. After that time, the mice will be humanely euthanized and the legs will be harvested to do microscopic evaluations of the effects the contents of the capsules had on the surrounding tissues. The animals will be observed daily by LARC and the research group and any abnormalities will be discussed with the LARC Veterinarian.”

c. **What is/are the expected outcomes of the study:** We expect some materials tested in this study to stimulate new bone growth in the animals, a result that could be used to improve the health care of both humans and animals.

d. **How the project will benefit science, medicine, or society:** If any particular material grows new bone in animals, it may also grow new bone in humans. Any bone sample that stimulates new bone growth in the mice could potentially be used in the manufacture of a product to use in broken bones or holes in bones of human patients.