**How Animals Help**

The vast majority of animals studied in research are mice and rats (90%-95%). Scientists need other animal models as well, and major breakthroughs have been made and are in the process of being made thanks to studies conducted with these animals:

 **Armadillo**

The armadillo is one of the only animals besides the monkey and mouse in which the leprosy bacillus grows. Through research with armadillos, scientists strive to develop a preventative treatment or vaccination against leprosy to be used in areas of the world where leprosy is still prevalent.

**Bats**

Scientists from Texas are batty over a new discovery which could lead to the single most important medical breakthrough in human history - significantly longer lifespans. The discovery shows that proper protein folding over time in long-lived bats explains why they live significantly longer than other mammals of comparable size, such as mice.

Federation of American Societies for Experimental Biology, 6/30/09.

1/31/10.

**Dogs**

 Because their cardiovascular and respiratory systems resemble those of people, dogs have been invaluable to our understanding of healthy and diseased states of the heart and lungs. For example, dogs were vital to the development of angioplasty as a treatment or preventive measure for heart attacks and other heart conditions in humans. In angioplasty, a tiny tube is surgically threaded through the femoral artery in the leg to unblock the coronary arteries that surround the heart, thus enabling the blood to pump more freely.

Dogs are possibly the most varied-looking mammal species on the planet. It's this diversity of looks that make man's best friend the perfect laboratory for connecting sets of genes to particular traits and understanding the molecular mechanisms that govern variation in dogs as well as humans and other mammals. Yahoo! News, 3/1/10.

**Ferrets**

CDC's Daniel Jernigan says experiments with ferrets done there suggest that the current vaccine has no power against the H1N1 strain of swine flu now circulating the globe. Science, 4/29/10.

**Insects**

At Scripps Research Institute in Jupiter, Florida, scientists are working to find clues about how the human brain processes memories. Their laboratory test animal is not a chimp or a dog or a rat - animals that we know can remember things - it is the common fruit fly. Voice of America, 3/17/10.

**Guinea Pigs**

Scientists working with guinea pigs say they've shown how an experimental drug might restore the function of nerves damaged in spinal cord injuries. UPI, 11/23/09.

**Mice**

 Mice are used more often than any other animal in research.

New research with mice has revealed a major breakthrough in the use of cough medicine ingredient noscapine as a prophylactic treatment for prostate cancer. MedInsight Research Institute, 3/19/10.

Dramamine, which is typically used to treat motion sickness, could help patients suffering from heart disease, according to new research with rats and mice. Discovery, 3/15.

**Non-Human Primates**

 Monkeys and other non-human primates represent less than one percent of all animals used in research, but they have contributed to major medical breakthroughs due to their physiological similarities to people. Primate studies have led to the understanding of AIDS, and have helped in the understanding of the function of brain cells in Alzheimer patients.

**Pigs**

Pigs have been instrumental in the treatment of burns and the study of the healing process of burns. Today, pieces of pig skin tissue are used as temporary bandages to cover serious burns on firefighters and other burn victims. The bandage protects the burn patient from contracting a serious or even life-threatening infection, and allows the person's own skin to regenerate.