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What's the Point of Bioscience Research?

Bioscience research is most basically used to understand biological systems. It can also be used to enable genetic engineering of living things. Bioscience can be defined as any science that deals with biological aspects of living organisms, or anything that eats, breathes, or sleeps. The limits of any area of the planet in terms of sustainability of plant or animal life can be conquered to a certain extent if animals or plants are genetically engineered to make them more pest resistant or tougher. Animals are used in biomedical research to help us understand how the human body works or to find cures and treatments for diseases. Testing new drugs for safety and evaluating medical procedures before they are used on humans are other important roles animals play in biomedical research. Animals are used because their bodies work in similar ways to humans, despite the difference in appearance. Laboratory mice are more often used than any other animal species. Mice, rats, hamsters, and other rodents make up ninety percent of the animals used in biomedical research. These animals are used mainly because their bodies work similar to humans, and they are small, easy to handle, inexpensive to buy and care for, and produce many offspring in a short amount of time. In addition to animal research, computer models and cell tissue studies are used to discover new ways of solving complex problems. Cells in test tubes and computer simulations aid research, but simply cannot mimic the complexities of the human body.

Bioscience research has contributed to many of the recent medical advances. It has given us heart bypass surgery along with other life-saving surgeries. Organ transplants were made possible due to biomedical research. Furthermore, vaccines to prevent childhood diseases are a result of bioscience research. Animal research has aided people in many different ways. Thanks to animal research, almost one million children aged five or under survive each year post accidental exposure to a potentially poisonous substance. In addition, children with sickle cell disease have a higher chance of living longer, pain free lives. Possibly one of the more inspiring instances of how animal research has helped people is that children today do not know what an "iron lung" is due to the virtual eradication of the crippling polio. The common goal of bioscience research is to continually further these advances so that people may be able to live more comfortable lives.