



of animals needed to obtain for ways to reduce the number researchers continue to look Scientists and medical treatments and procedures assure the safety of new medical and curing diseases that affect both humans and animals and to methods for diagnosing, treating, more about these conditions and to discover more effective understand the situation. Researchers use animals to learn conditions in both humans and in animals, they need to are a critical part of biomedical research for many reasons. Before scientists can develop ways to treat health used in medical research, testing, and teaching. Animals research that specializes in the care and study of animals Laboratory animal science is the area of biomedical **Important to biomedical research? Why is it**

and even ourselves. families and friends, our pets, wildlife and zoo animals, to cure medical conditions and diseases that affect our to antibiotics, and from asthma to diabetes. They seek conditions from spinal cord injuries to cancer, from viruses their area of expertise, researchers investigate many ways to either treat or cure the disease. Depending on them understand what causes the problems and to identify design and conduct experiments that help search for a permanent cure. They develop an effective treatment and processes of a disease in order to together to study the biological and a variety of scientists working technicians, research technicians, scientists, engineers, animal care doctor, veterinarians, computer Such a team might include medical different backgrounds and specialties requires a team of people drawn from areas of both the life and physical sciences and This broad field of research includes many important **Who conducts biomedical research?**



in animals. cure diseases that cause illness and death in people and biomedical researchers look for ways to prevent, treat, and and participation of many professionals. Through careful research is an evolutionary process that requires the input biological processes and the causes of disease. Biomedical undertaken to gain knowledge and understanding of the Biomedical research is the broad area of science that is **What is biomedical research?**

- Research corporations
- Biotech firms
- Colleges/universities
- Pharmaceutical companies
- Hospitals/medical schools
- Veterinary schools
- Military/government agencies
- Non-profit associations
- Voluntary health organizations

There are positions in: Just as careers in biomedical research cover a wide range of positions and fields, jobs can be found around the world and in a variety of work environments.

Where would I work? biomedical research that will suit you perfectly! desire to help both humans and animals. There is a job in of disease, medical conditions, and health, and the are a joy for discovery, a need to further our understanding

- Research scientists work in a research laboratory designing and conducting experiments.
- Computer programmers and statisticians work with statistical analysis of research results.
- Technical writers use their good writing skills to prepare grant applications, write research plans, and summarize results.
- Medical doctors work with human patients.
- Veterinarians and animal care technicians care for research animals.
- Engineers design and maintain medical devices, research equipment, animal housing, and laboratory facilities.

Depending on your interests and the field of science you like best, there are many career options in biomedical research!

What kinds of careers are there in biomedical research? Research scientists work in a research laboratory designing and conducting experiments. Computer programmers and statisticians work with statistical analysis of research results. Technical writers use their good writing skills to prepare grant applications, write research plans, and summarize results. Medical doctors work with human patients. Veterinarians and animal care technicians care for research animals. Engineers design and maintain medical devices, research equipment, animal housing, and laboratory facilities. The main characteristics these careers have in common are a joy for discovery, a need to further our understanding

valid results, to refine experimental techniques, and to replicate animals with other research methods. Currently, even the most sophisticated technology cannot mimic the complicated interactions occurring among cells, tissues, and organs in a living body; so, animals will continue to play an important, and irreplaceable, role until effective alternatives are found. Researchers remain devoted to providing the best care for these animals, which also strengthens valid and reliable research results.

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www.ca-biomed.org/csbr

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For additional information, resources, and web links about the interesting career opportunities in biomedical research, visit:

- www.care.aalas.org
- www.kids4research.org
- www.aalasfoundation.org
- www.ca-biomed.org/csbr

View the “Accept the Challenge to Care: Careers in Laboratory Animal Science” video at www.aalasfoundation.org. This video explores a variety of career choices in laboratory animal science and explains the benefits of biomedical research to people and animals. Visit www.care.aalas.org where you will find a collection of video interviews of laboratory animal science professionals speaking about their day-to-day job responsibilities and offering career advice in the rewarding field of laboratory animal science.

Careers in Biomedical Research



Accept the Challenge to Care



Science (AALAS) has both technician and management certification programs for those desiring to work caring for animals in the research field. For more information visit their web site at www.aalas.org.

Not all careers in biomedical research require a college or advanced degree. Some careers in research require certification or specialized training instead of, or in addition to, college or graduate school. The American Association for Laboratory Animal Science (AALAS) has both technician and management certification programs for those desiring to work caring for animals in the research field. For more information visit their web site at www.aalas.org.

Work with your academic advisor to ensure you are adequately prepared! Work with your academic advisor to ensure you are adequately prepared! Work with your academic advisor to ensure you are adequately prepared!

Many in biomedical research have gone onto graduate school after college and obtained advanced degrees. If you want to pursue a career that requires graduate school or a professional degree, keep in mind there are individualized requirements for specific college courses and entrance exams for graduate, medical, or veterinary school. Work with your academic advisor to ensure you are adequately prepared! Work with your academic advisor to ensure you are adequately prepared!

Whether you plan on a career right out of high school or a graduate program, you will need to take several steps to prepare for a career in biomedical research. Start with your high school guidance counselor to make sure you take all the required classes for entrance into an accredited college or university. College is competitive and can be expensive; getting good grades will increase your chances of being accepted into the college of your choice and of receiving scholarships. Once you are in college, always work with your academic advisor to plan your course load to not only satisfy all graduation requirements, but to also gain exposure to the sciences relating to biomedical research. Knowing more about each field of science can better help you choose the specific area for your future career!

Start right now! For any career in biomedical research, a strong foundation in the life and physical sciences and math in high school is important. While some jobs in research require only a high school diploma, others need specific training, certification, or a college degree, and still others require education beyond the four-year college degree. It is important that you take advantage of all the classes your school offers in these areas.

Whether you plan on a career right out of high school or a graduate program, you will need to take several steps to prepare for a career in biomedical research. Start with your high school guidance counselor to make sure you take all the required classes for entrance into an accredited college or university. College is competitive and can be expensive; getting good grades will increase your chances of being accepted into the college of your choice and of receiving scholarships. Once you are in college, always work with your academic advisor to plan your course load to not only satisfy all graduation requirements, but to also gain exposure to the sciences relating to biomedical research. Knowing more about each field of science can better help you choose the specific area for your future career!

Careers in biomedical research provide an opportunity for discovery, and each day professionals in this broad field know they are making a difference in the lives of people and animals. Their work provides hope to millions suffering from medical conditions or diseases—hope for new and better treatments, hope for a better life, hope for a cure. Through their individual contributions, biomedical researchers have the potential to improve the lives of countless people and animals all over the world. From engineers to scientists, from nutritionists to computer scientists, and from technical writers to laboratory animal technicians, these people have chosen to accept the challenge to care. You can too—by choosing a career in the exciting, demanding, and rewarding field of biomedical research.

