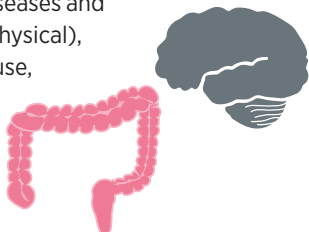


BIOMEDICAL RESEARCH: WHAT IS IT AND WHO CONDUCTS IT?

Biomedical research, as defined by the Organization for Economic Cooperation and Development, comprises:

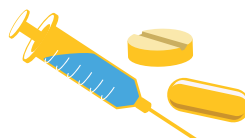
The study of specific diseases and conditions (mental or physical), including detection, cause, prevention, treatment, and rehabilitation of persons.



The scientific investigation required to understand the underlying life processes that affect disease and human well-being, including areas such as the cellular and molecular bases of diseases, genetics, and immunology.



The design of methods, drugs, and devices used to diagnose, support, and maintain the individual during and after treatment for specific diseases or conditions.



Biomedical researchers are often categorized by the type of work they do, although some conduct several types of work and can be included in several categories. The types of biomedical researchers include, but are not limited to, the following:

Basic researchers study organisms, cells, molecules, or genes to gain new knowledge about cellular and molecular changes that occur naturally or during the development of a disease.



Clinical researchers conduct clinical trials; study a particular patient or group of patients, including their behaviors; or use materials from humans, such as blood or tissue samples, to learn about the way the healthy body works, disease, or response to treatment.



Population scientists, such as epidemiologists, social and behavioral scientists, and health services researchers, study the patterns, causes, costs, and effects of health and disease conditions in defined populations, or the effects of interventions on these conditions. These areas of research are highly collaborative and can span the spectrum from basic to clinical to population-wide research.



Physician-scientists care for patients and conduct research. They may perform population, clinical, or basic research.



Adapted from (1)

American Association for Cancer Research (AACR) Cancer Progress Report 2018