

Mayo Clinic Biobank

Introduction

Thank you for your interest in the Mayo Clinic Biobank. In this pamphlet you will find more details about what a biobank is, why the Mayo Clinic Biobank is being created, and what types of studies might be performed using the Biobank.

What is a biobank?

A biobank is a collection of biological samples (such as blood) and health information. Biobanks can be large and hold thousands of samples, or they may be small and hold only a few hundred samples. Different biobanks collect different types of samples and information. The types of information and samples collected depend on the specific purpose of the biobank. For example, some biobanks are specific to a particular disease, such as cancer. Other biobanks are population based and contain samples and information from people in a specific population or region.

How does a biobank make performing research easier?

The biobank serves as a library for researchers. Therefore, the time and resources needed to recruit new participants for each research study is greatly reduced because samples and corresponding medical information are available in one place. By making sample collection and patient recruitment more efficient, better studies can be performed in a more timely fashion.

What kinds of places create and use biobanks?

- hospitals
- research centers
- universities
- organizations that study specific diseases

Have other biobanks been successful?

Yes. Biobanks are a very important part of performing medical research and have produced many research studies with important implications for improving health. For example, research studies using samples from different biobanks have allowed researchers to learn more about:

- safe and effective treatment doses of anti-seizure medications and medicines used to treat heart disease
- genetic changes that may increase a person's risk for osteoporosis, rheumatoid arthritis, asthma, or certain cancers

What type of biobank is Mayo Clinic creating?

Initially, samples and health information will be collected from 20,000 adult patients. Participants will not be selected for the Mayo Clinic Biobank based on any specific factors other than age (all participants must be 18 years or older). Recruitment will start at the Mayo Clinic Rochester site and eventually expand to all other Mayo Clinic locations (Florida, Arizona, and the Mayo Health System).

Why is Mayo Clinic developing the Biobank?

Mayo Clinic is developing the Biobank to advance clinical research. It is hoped that future research using information from the Biobank will lead to improved health care.

What types of samples will be collected?

A blood sample and information will be collected from all participants. Each participant will have the option to permit use of any tissue samples collected and stored from past and future surgeries performed at Mayo Clinic. Having different kinds of samples will allow researchers to perform a wide range of studies.

What studies might be done using the Mayo Clinic Biobank?

The goal of the Biobank is to provide samples for different types of studies. Many of the studies will be aimed at gaining a better understanding of how a person's genes (DNA) may influence overall health and wellness. For example, some studies will focus on identifying genetic changes that might affect cancer risk. Other studies may focus on how differences in DNA influence patients' responses to certain medicines. If researchers gain a deeper understanding about the relationship between genes and disease, it is hoped that physicians may be better able to tailor medical evaluations, recommendations, and treatment plans for their patient's in the future.

How long will Mayo Clinic use the Mayo Clinic Biobank?

The Biobank is a resource meant to serve the Rochester and Mayo Clinic community for years, and there are no plans for it to end. Participants will be a part of ongoing health research conducted at Mayo Clinic. Any participant can stop participating at any time.