As a ghost-writer for WooContent, I wrote the below article for MUA.

Published: https://www.mua.edu/resources/blog/how-to-become-a-cardiologist

# What is a cardiologist and how to become one?

Your heart is one of the most important organs in your body. It works all day and night to deliver oxygen and pump blood to your brain and all over your body. Without your heart working relentlessly like this, your body would not be able to fight infections, discard waste or regulate its temperature. A cardiologist plays a vital role in making sure patient's hearts are cared for and treated throughout their lives.

If you are thinking about specializing as a cardiologist or want to learn more about this important field of medicine, this guide will help you.

### What is cardiology?

Cardiology is a medical specialty and a branch of internal medicine that takes care of disorders of the heart. It deals with the diagnosis and treatment of many heart-related health concerns such as congenital heart defects, coronary artery disease, heart failure, and heart disease.

Aspiring cardiologists can expect to learn fundamentals and details about the cardiovascular system including the way the heart processes oxygen and the various coronary arteries and veins in the organ. Cardiology also looks at studying and treating a range of heart concerns for example:

- Blood pressure and hypertension
- Blood cholesterol
- Atherosclerosis
- Angina pectoris
- Cardiac arrest
- Disorders of the myocardium and pericardium
- Congenital heart defects and much more

### What is a cardiologist?

A cardiologist specializes in investigating and treating cardiovascular system ailments and they are also responsible for the medical management of various heart diseases. As a cardiologist, you will need to know how to conduct certain tests and procedures such as angioplasty, ECG, stress tests, inserting of pacemakers, and heart catheterizations.

According to the CDC, a heart attack occurs <u>every 40 seconds</u> in the United States. This alarming figure ensures that cardiologists are an important and extremely necessary figure in communities across the country. Some subspecialties of the cardiology field include:

### Pediatric cardiology

Pediatric cardiologists treat and diagnose heart problems in children. Many also work with patients before birth (antenatally) to identify congenital heart diseases and may remain their cardiologists throughout their childhood and adulthood.

#### Cardiac electrophysiology

Also known as a cardiac EP, an electrophysiologist focuses on all forms of arrhythmias. They treat conditions that affect the heart's electrical activity and most of the time will need to take care of older patients. However, in some cases, younger people with congenital heart conditions may need to see an electrophysiologist too.

#### Interventional cardiology

An interventional cardiologist uses nonsurgical, catheter-based procedures and specialized imaging techniques to diagnose and treat heart and blood vessel conditions. It is a unique discipline to specialize in and explores the different chambers of the heart in detail. If you specialize as an interventional cardiologist you will learn how to place stents in clogged arteries, repair holes in the heart and learn to use other cutting, ballooning, and laser devices.

#### Echocardiography

Echocardiologists focus on the performance and interpretation of cardiac ultrasound techniques. They conduct tests that use sound waves to produce live images of a patient's heart in order to obtain accurate information about the heart's rhythm and blood circulation.

### Nuclear cardiology

Nuclear cardiology uses noninvasive techniques to assess myocardial blood flow, evaluate the heart's pumping functions and visualize a patient's heart attack. They work together with other cardiologists and other specialists to decide which nuclear cardiology techniques are required for the patient's unique condition. Many nuclear cardiologists are part of the American Society of Nuclear Cardiology (ASNC).

### Cardiothoracic or cardiovascular surgery

Technically, these are not cardiologists but surgeons. Cardiologists will usually refer their patient to a cardiothoracic surgeon for an operation because a majority of cardiologists do not open the patient's chest to perform surgeries themselves.

### Life as a cardiologist

Cardiologists live a very busy and demanding life, but many who take up this field of medicine say that they would do so all over again. No matter what specialty you choose, the medical industry is hard work. You can expect to be on-call during the weekends and work long hours at a stretch, but if you are passionate about the human heart this can be the right discipline for you.

As a cardiologist, you can expect to spend a majority of your time working in direct clinical care with patients (both admitted and outpatients), alongside laboratory and admin work. You will have regular meetings with your team, other staff members, and external specialists to liaise about new developments in your industry, improvements to your service, and any updates about the community you treat.

You may also spend your time researching and teaching about your specialty, and there is always room to learn more. Different subspecialists of cardiology will have their own requirements and responsibilities. Specialties like pediatric cardiology or cardiovascular surgery may require more last-minute emergency responses during the weekend and longer hours than echocardiography, who might be able to book their scans well in advance.

The city you live in, the type of lifestyle you want to lead, and the demographic of patients you treat will all influence your work-life balance and life as a cardiologist. Many successful cardiologists across the world have been able to lead a fruitful and fulfilling family and work-life at the same time. It requires commitment, hard work, and support from those around you.

## Cardiologist salary - How much can you expect to earn?

As a cardiologist in the United States, you can expect to earn an average annual salary of \$379,965. This is one of the highest-paying disciplines in the healthcare industry and is always in demand. Those with more than two decades of experience can even expect to earn \$500,000 or more. While those with under two years of experience will likely start their career at a salary of around \$220,000.

Salaries change and depend on the city you live in, your skills, and even the healthcare facility you work for. Male cardiologists typically earn 5% more than their female counterparts, however, this pay gap is slowly decreasing with each passing year.

The below table shows the average salaries of cardiologists in some US states:

State	Average Annual Salary
Hawaii	\$349,402
Massachusetts	\$349,335

Nevada	\$326,500
Washington	\$323,778
New York	\$316,072
Virginia	\$303,337
California	\$291,732
Michigan	\$277,812
Texas	\$264,646
Alabama	\$250,898

Cardiologists in Canada can expect to earn a salary of anything between 223,000 CAD to 691,000 CAD. This depends on how many years of experience you have, what kind of skills you can offer, which city you will practice in, and the economic climate at the time. You can expect a raise of approximately 7% each year.

### How to become a cardiologist

It takes more than 10 years of training and studying to become a cardiologist, and this includes 4 years of pre-medical study, 4 years of medical school, and 3 or more years of cardiology fellowship and residency. Each subspecialty of cardiology will require a distinct amount of fellowship years to be completed.

Even though it is a long and challenging process, it ultimately pays off when you become a respected and valued member of the community and healthcare system. If cardiology sounds like the job of your dreams, learn more about how you can apply <a href="here">here</a>.