I am a physiologist who studies how adverse fetal development can lead to diseases later in life.

Eileen Chang, Ph.D.
Postdoctoral Research Fellow
Oregon Health and Science University
Portland, Oregon

Learn more about physiology careers at the-aps.org/careercards
I learned that some babies are born with congenital heart diseases like blue baby syndrome. I wanted to invent medical devices and help these babies live a normal and healthy life.

I knew I wanted to be a scientist when...

1. Have critical thinking and a desire to learn.
2. Have ethical principles.
3. Persevere when faced with obstacles.
4. Form collaborations and work in teams.

To be a scientist, you need to:

To answer a question and release more cards at the-aps.org/careercards

How does low oxygen levels affect fetal heart development and coronary growth?

One of my research questions:

In our experiments, we record the fetal heart rate, blood pressure, and take blood samples to measure blood gases (oxygen, carbon dioxide), pH, or other nutrients and hormones.

Technology I use:

I found that acute hypoxia can cause the fetal brain to express more inflammatory genes, and certain drugs could potentially protect the baby’s brain from hypoxic damage.

My most exciting discovery:

Eileen Chang, Ph.D.