I am a cardiovascular physiologist and study how the brain controls blood pressure.

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Matthew Zimmerman, Ph.D.

One of my research questions:

Does increased production of antioxidants in the brain (such as the protein SOD) decrease blood pressure?

Technology I use:

I use a mouse model in my research because there are many similarities between the mouse and human cardiovascular systems. We can increase the mouse’s blood pressure very carefully, increase their production of antioxidants, and record their blood pressure over time.

My most exciting discovery:

In graduate school, I discovered that when the brains of animals with high blood pressure produce more of a certain protein (superoxide dismutase or “SOD”), their blood pressure decreases. Could increasing SOD in human brains help control high blood pressure? That is a good research question!

You can check out some science articles I’ve written at http://bit.ly/MatthewZimmermanArticles

To be a scientist, you need:

1. Working hard
2. Paying attention to detail
3. Being ready to adapt when experiments don’t work as I expect

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

I have wanted to be scientist since high school when I was interested in studying HIV, the virus that causes AIDS. In graduate school, my interests changed to cardiovascular diseases, such as hypertension which affects a third of U.S. adults.

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