



What does this tell you about the types of people who do science?

Scientist Spotlight: Alicia Zamudio



To help us prepare for what we are about to study in our class, we are going to explore the work of Alicia Zamudio. Dr. Alicia Zamudio is a neuroscientist who studies the cell biology of neurodegenerative diseases. During her time as a PhD student at the Massachusetts Institute of Technology (MIT), she studied how cells create tiny “droplets” inside the nucleus, called condensates. When a cell creates condensates at certain genes, the cell can control which genes turn on faster and better. This type of cell activity helps scientists like Dr. Zamudio better understand what can go wrong when gene regulation stops working.

Click the link to learn more about the background of Alicia Zamudio:

<https://www.youtube.com/watch?v=cuLDRCSwieo>

<https://wi.mit.edu/multimedia/biogenesis-podcast-alicia-zamudio-young-lab-changing-majors-and-exploring-transcription>

Click the link to learn about the scientific work of Alicia Zamudio:

<https://www.youtube.com/watch?v=gsERuIqHadU>

Instructions for Written Assignment:

After reviewing the background and scientific work of Alicia Zamudio, write a reflection on what you discovered. You might wish to address some of the following:

1. *What was most interesting to you in reviewing these resources?*
2. *What did you learn from these resources about cell biology?*
3. *What new questions do you have after reviewing these resources?*
4. ***What do these resources tell you about the types of people that do science?***



About the Authors: We're Team Panda, a group of students from Hayward High School. In our free time, we love to listen to music, journal, and draw. We chose Dr. Alicia Zamudio as our scientist because we related to her journey into STEM as a first-generation college student. Her work in cell biology has taught us a lot about what goes on in our cells and how these tiny structures can have a big impact on our overall health. By sharing Dr. Zamudio's story, we hope that more people will become inspired to see themselves in science too!





What does this tell you about the types of people who do science?

Scientist Spotlight: Geoffrey Siwo



To help us prepare for what we are about to study in our class, we are going to explore the work of Geoffrey Siwo. Dr. Siwo is a computational biologist from Kenya. His hobbies include soccer and science. His dad worked for the government, and they moved around a lot when he was a kid. When he was in high school, he was already interested in understanding cancer. After high school, he went to Egerton University in Kenya. They did not have lab equipment, so he used computers for research. He was sponsored to fly to the United States for a biology conference. He later went to the University of Notre Dame for his PhD. He is now a faculty at the University of Michigan Medical School and continues to use computers to investigate biological questions.

Click the link to learn more about the background of Geoffrey Siwo:

<https://www.iamascientist.info/geoffrey-siwo>

^Scroll and click on the different headings and arrows in this interactive webpage.

Click the link to learn about the scientific work of Geoffrey Siwo:

<https://www.youtube.com/watch?v=himOFDCpBNY>

Instructions for Written Assignment:

After reviewing the background and scientific work of Geoffrey Siwo, write a reflection on what you discovered. You might wish to address some of the following:

1. *What was most interesting to you in reviewing these resources?*
2. *What did you learn from these resources about computers and biology?*
3. *What new questions do you have after reviewing these resources?*
4. ***What do these resources tell you about the types of people that do science?***



About the Authors: Our name is Team MSN. We are a team of Mt. Diablo freshman high school students paired with an SFSU undergraduate partner! We picked Geoffrey Siwo because we both like to play soccer. We didn't know much about cancer and about anything, really. Geoffrey Siwo made us interested in it! We really enjoyed reading about him and making this with our mentor. Geoffrey Siwo is our favorite scientist because what he does is very cool and he likes soccer just like we do. I hope we get to do more projects like these, learn new things, and discover more scientists. Geoffrey Siwo is the best scientist.





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Scientist Spotlight: Melanie Morrison



To help us prepare for what we are about to study in our class, we are going to explore the work of Melanie Morrison. Melanie Morrison is a neuroimaging scientist. She studies powerful brain scanners to help develop treatments for brain related diseases. Her hobbies include poetry, surfing, movement/yoga, cooking, and baking, and she loves to travel with friends. She is from Canada and grew up near Toronto. Her work focuses on using MRI (Magnetic Resonance Imaging), to help doctors decide which patients are good candidates for surgeries and to make sure treatments are suitable for their patients.

Click the link to learn more about the background of Melanie Morrison:

<https://www.iamascientist.info/melanie-morrison>

^Scroll and click on the different headings and arrows in this interactive webpage.

Click the link to learn about the scientific work of Melanie Morrison:

<https://www.youtube.com/watch?v=WikLFmUgecs>

Instructions for Written Assignment:

After reviewing the background and scientific work of Melanie Morrison, write a reflection on what you discovered. You might wish to address some of the following:

1. *What was most interesting to you in reviewing these resources?*
2. *What did you learn from these resources about the brain and neuroimaging?*
3. *What new questions do you have after reviewing these resources?*
4. ***What do these resources tell you about the types of people that do science?***



About the Authors: Our name is Team JENBN. We are a team of Mt. Diablo freshman high school students paired with an SFSU partner! Our background has lots of memories and is full of happiness. We, now as teenagers, have lots of dreams to accomplish in the future. We all have different tastes in stuff but we found out that we also have some things in common. Melanie Morrison likes to bake and all of us have an interest in baking and cooking. One of us is even in cooking class! Melanie Morrison not only shares the same taste but we all found her story on why she decided to study brain scanners so interesting, and it really inspires us to keep it up with our dream of accomplishing what we mostly want for our future jobs. Two of our group members have an interest in studying for a career in healthcare, which also made us even more interested in

Melanie Morrison. J wants to be a nurse, which she explained how she found some inspiration in Melanie Morrison. E wants to take care of animals, which she also felt really good choosing Melanie Morrison as our scientist.

