

# Matthew

## *Bioengineer*



Army Medicine / flickr / CC BY 2.0

My name is Matthew. I'm a bioengineer at the company producing these mosquitoes. I truly believe our company is doing great work for the greater good. The mosquitoes we engineer combat diseases which sicken and kill many people every year. Our product means that people no longer need to rely on dangerous chemicals in insect repellent or insecticides to stay safe from mosquito-borne diseases. With strict guidelines, plenty of rigorous testing, and the best scientists on our team, this is a sound product for reducing a public health issue. I want to get public input because I know that there are social and ethical questions about their release. We also know that our mosquitoes won't be as good at mating as wild ones, which is why we're considering gene drives.



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# Maria

## Bioengineer



My name is Maria. I'm a bioengineer at the company developing these vaccines. I truly believe our company is doing great work for the greater good. The vaccines we engineer combat Zika preventing disease and birth defects. Our product means that people no longer need to rely on dangerous chemicals in insect repellent or insecticides to stay safe from mosquito-borne diseases. With strict guidelines, plenty of rigorous testing, and the best scientists on our team, this is a sound product for reducing the Zika epidemic. I want to get public input because I know that there are social and ethical questions about the vaccine's release. We also know that people can be afraid of vaccines which is why we are considering vast community outreach programs.



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# Anna

## Ecologist



Jo Straube / Wikimedia Commons

I'm Anna, an ecologist who has done academic research in São Paulo for 4 years. Our ecosystems give us many things we need, including food, fresh air, clean water, and medicine. I have seen experiments go wrong when they release a foreign species into a habitat. I believe GE mosquitoes could do irreversible damage to the environment. I think it's irresponsible to conduct field trials in São Paulo until the risks are fully understood. Even when scientists have the best intentions, they cannot predict the outcome of their experiments, and there might be negative impacts on the ecosystem and economy. A way to avoid such negative impacts is to use a vaccine that is lab tested and has passed clinical trials. I get media inquiries about these mosquitoes and fear that people see me as standing in the way of a solution to São Paulo's Zika problem. I care about people's health and would like to see a vaccine, but if we release something into the environment, there will be no turning back. I strongly caution against releasing engineered species.



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**PERSONAL PROFILE**

# Faraji

## Parent



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My name is Faraji, and I have two children. We live about five miles away from the city center. My daughter was born with birth defects from when I was infected with Zika. We do not have a way to get to the health clinic easily, and often must wait several hours to be seen. My daughter is getting worse, and I grow increasingly concerned about the safety of my future children as well. My sister is pregnant, and she has not received testing that she needs to protect and inform herself and the baby. However, I'm concerned that introducing these mosquitoes might not work the way we expect and might put our community in danger. I've heard rumors about a developing vaccine but help from the US generally comes with some kind of catch. A vaccine could be good but what if the vaccine actually gives me Zika?



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# Lucas

## Mayor



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I'm Lucas, the mayor of São Paulo. The residents of my city have suffered from Zika for a a brief time but it has greatly affected us. Genetically engineered mosquitoes have the potential to eliminate Zika from our city but so do vaccines. The companies that have produced these mosquitoes and vaccines are willing to test them in our area, using São Paulo as a future case study. I think either solution could help São Paulo become a healthier city, a better tourist destination, and possibly a center of biotechnology. However, many of my constituents are skeptical of and even frightened by both technologies. They have seen communities suffer after accepting help from the US. How can we eliminate Zika while considering the legitimate concerns from citizens in São Paulo?



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# Sharon

## *Relief worker*



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I'm Sharon, a community health worker with the Red Cross in São Paulo, Brazil. The Zika virus is becoming increasingly more persistent and many of the patients cannot afford the tests anyway. The situation here is made worse by the high prevalence of dengue fever, which compromises the tests of those infected. I've heard rumors of clinical trials of a Zika vaccine, but that may take years to be approved and carries its own risks. Plus it is difficult to get everyone in the community vaccinated. Genetically engineered mosquitoes could also be a powerful tool in the fight against Zika.



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