

Katie Huber, Ph.D.

23andMe



Prior to joining 23andMe [Katie Huber](#) worked as a contractor for the US Navy studying anthrax. She also helped design typhoid vaccines in the Centers for Infectious Diseases and Vaccinology at Arizona State University with Roy Curtiss III. Katie is proud to claim to that their typhoid vaccine flew on the Space Shuttle Atlantis in 2011. Because earlier studies had shown that spaceflight triggers a wide range of virulence behaviors in Salmonella, they wanted to look at how the vaccine bacteria behaved under the same circumstances. Would the bacteria be able to act as aggressively or would it have trouble turning on certain genes? It was a way to get see what happens in the low fluid shear environment of the intestine, which has a surprising number of similarities between the environment inside a human intestinal tract and the weightless environment of space.

Katie has experience as a human rights person who enjoys working with an Institutional Review Board (IRB) in assuring that research obeys all the rules and regulations and who looking out for the rights of the people in research studies. She feels 23andMe studies generate what individuals really want, to participate in research because they feel they are an important part of the project. At 23andMe Katie is seeking the results of everyone's experiences and genetics to find new risk factors for diseases and discover what makes some treatments work only for a subset of individuals with a disease.

During her time with the Navy, Katie was part of a team studying soldiers that had been repeatedly vaccinated against anthrax. Typhoid was a real puzzle, since the disease only infects humans. The team had to be creative with experiments to figure out how the vaccines would behave in humans without actually vaccinating a human. By collecting a lot of blood samples and watching how white blood cells reacted when introduced to the bacteria Katie experienced people who participated in research always wanting to know what happened with the experiment? Inquiries such as did it work; what was learned; did their cells fight off the disease; etc... Generally the team was not allowed to share those results with the participants.

BACKGROUND: Position, Scientist; Hometown Stroudsburg, PA; Education, B.S: Biochemistry and Molecular Biology from Penn State, Ph.D. in Microbiology awarded by Ohio State, Post Doctorial research at Arizona State University.

END OF DOCUMENT