



## Dr. Joan Esnayra – Geneticist

1



Can you imagine all of the work that goes into building roads? Clearing land, pouring cement, painting yellow dividing lines, and putting in street lights are just a few of the projects that need to be completed in order to construct roads. There is important work that needs to happen before roads are even built, and that is planning and mapping. If there were no plans before construction began, where would the roads take us?

The science policy work that I do is like the planning that happens before a road gets built. Policy is a series of guidelines for achieving the goals of a government, organization, or individual. In other words, policy is like a road map used to get you where you want to go.

I am a program officer at the National Academies of Science (NAS - [www.nationalacademies.org](http://www.nationalacademies.org)) in Washington D.C. Abraham Lincoln and Congress ([www.house.gov](http://www.house.gov)) started the Academies in 1863 so that the nation would have an organization of scientists and scholars that could advise the country on matters of science and technology policy.

Although I was trained as a geneticist, I work in many different fields of science at NAS. I am very interested in not only science, but also how we apply science to our lives, and the impact that science has on our society and culture.

The journey of my life has been as complex as a road map. I have gone in many directions and faced many struggles, but my love of science and my desire for education have always been the forces that have kept me on track. Because I had a difficult home life where there was substance abuse, domestic violence and depression, school was the only place I felt safe and happy. I knew that getting an education was the way for me to improve my life.

After I graduated at the top of my high school class, I attended the University of Washington ([www.washington.edu](http://www.washington.edu)). When I was in college my grades went up and down like my emotions. I began to think I was stupid. Much later I found out this was a sign of bi-polar disorder, a mental illness. When I attended graduate school feelings of insecurity grew, as my illness got worse. I even encountered discrimination about being Native American (Yaqui). Over time, as I began to participate in study groups and classes, I saw that I was just as intelligent as everyone else. This newfound confidence helped me stand up to people that were discriminating against me for being a disabled Native American woman and for the first time I was able to truly believe that I am a strong person and that I deserve to be treated with respect.

There is another reason that I am able to feel strong, and his name is Wasabe, my service dog. A service dog is trained to help people with disabilities. There are physical disabilities like blindness and hearing loss, and psychiatric disabilities like depression and post-traumatic-stress disorder. Wasabe is able to sense when I need to take medication and he helps me when I feel depressed by being my constant and loving companion.

Major events like discovering service dogs, finishing my Ph.D., and working at NAS brought me to the end of one journey and the beginning of the next. Yet there is one thing I will remember every day of my life, and I hope you do too. You are a strong, intelligent person, and you always deserve to be treated with respect.