High Stakes Legos: Building Blocks of a Researcher

This will be a two part talk. The first part of this talk will center around the unsolvability of the general quintic polynomial by radicals, and how a (read "the") solution to that problem is leading to a deeper understanding of the rational numbers. In particular, we will discuss how a math question that seemed to be answered was then rephrased by a young man, and this rephrasing laid the foundation for nearly 200 years and counting of new research.

The second part of this talk will describe the stark absence of particular groups of people in STEM research and what a group of grad students, post docs, and researchers are doing to create stepping stones for people with diverse experiences to come to STEM.

Hopefully by the end of this talk you will see that problems which may not affect us directly, or may seem like someone else has already taken care of, can still have a tremendous effect on others and addressing those problems in new and creative ways can build a framework for amazing results that had yet to be dreamed of.