

Stacey Hancock
Montana State University

Title: Essential Data Literacy Skills for a Pandemic

Abstract: In our increasingly data-infused society, with the terms "big data," "data analytics," and "data science" becoming ubiquitous, data literacy is essential for an informed citizenry. During the COVID-19 pandemic, data illiteracy has enabled the spread of misinformation and has put lives at risk. In this talk, Dr. Stacey Hancock will demonstrate the key skills it takes to be data literate - what we really mean when we say "correlation does not mean causation," and why humans tend to see causation where there is none. We will look at examples of how and when news headlines or graphics tend to mislead, and will discuss what features to look for in scientific studies to see underneath those conclusions. Though many of these skills will be familiar to the audience, this talk will provide examples for use in the classroom and will offer an opportunity for discussion on how statisticians can teach data literacy throughout our society.