Title: Improving statistical skills through storytelling
Statistical concepts are an integral part of being able to quantitatively understand and analyze large sets of data that are utilized in undergraduate science courses and in the professional field. However, introductory statistical concepts have been found difficult for students to comprehend. To help bridge the gap between a student’s prior knowledge on the topic and the statistical lesson learned, statistical vignettes focus on specific quantitative concepts utilized in data analysis such as significant figures and linear regression.
Each vignette provides a structured opportunity for an instructor to step outside their intended lesson and present targeted information that addresses common misconceptions and improve quantitative reasoning skills in the context of an engaging storyline using a diverse cast of characters that helps guide students through the lesson. Vignettes can be used as a stand-alone lesson or be incorporated into the learning objectives of quantitative topics in STEM.