Michelle R. DeDeo* (mdedeo@unf.edu), 1 UNF Dr., Dept. of Mathematics & Statistics, Jacksonville, FL 32224. Data Science: Challenges in the Quintessential Interdisciplinary Field. Preliminary report.

In 2008, Anderson in a Wired Magazine editorial entitled The End of Theory: The Data Deluge Makes the Scientific Method Obsolete stated, 'Out with every theory of human behavior, from linguistics to sociology. . . . Who knows why people do what they do? The point is they do it, and we can track and measure it with unprecedented fidelity. With enough data, the numbers speak for themselves'. But do they?

In the 1980's, Cox interestingly stated, "Most real life statistical problems have one or more non-standard features. There are no routine statistical questions; only questionable statistical routines." Box & Draper later took this a step further by stating that, "All models are wrong, but some are useful."

Here we discuss the roles of scientists and engineers versus statisticians, distinctions and similarities between open data versus big data, challenges in evolving techniques for current and future data scientists, and updating old concerns over statistical analyses with the current challenges that data science poses. (Received September 17, 2019)