**Statistics and the Shirelles: How Physical Sciences Thinking Informs Popular Music Analytics**

# William F. Carroll, Jr. Ph.D.

# ACS President, 2005; Board Chair 2012-14

# Abstract

It’s Moneyball for popular music.

People love lists, especially lists of the “Best of All Time.” But direct comparisons of quality over long spans of time are hard—whether football teams, home run hitters, boxers or even songs. So how might you get to a list of the “Best” records of all time? Is that only a subjective determination—“It’s what I like”—or are there objective measures?

This talk digs deep into how you make objective decisions about subjective opinions, and uses scientific methods to analyze music popularity. We’ll learn how various data, analysis, handling and thinking techniques used in the physical sciences help with the analysis of other kinds of data--like music popularity charts. Oh yes—and there will be some audio lists including the 20 strongest charting records of those 32 years.