

**Hendricks Sports Management Response to New York Times Article
Dated February 10, 2008 by Bradlow, Jensen, Wolfers, and Wyner**

The most important statements made by the four professors who authored the New York Times article are these: "Our reading is that the available data on Clemens's career strongly hint that some unusual factors may have been at play in producing his excellent late-career statistics. In any analysis of his career statistics, it is impossible to say whether this unusual factor was performance-enhancing drugs."

The Clemens Report does not state that the statistics "prove" anything, something missed by the four professors. The purpose of the report is to provide the statistical background of Roger Clemens' career and to correct misconceptions about his career in the public forum. For example, it was being widely reported that Clemens was "washed up" when he left Boston in 1996. In fact, Clemens led the American League in strikeouts in 1996, tied his record of 20 strikeouts in a single game, and was a leader in many pitching categories.

*** Criteria:** The criteria the authors of the Clemens Report used to select pitchers for comparison were 2,000 innings pitched, high strikeout rates and high-quality performance as a starting pitcher. The Wharton professors, in their selection of pitchers to analyze, make the fundamental assumption that all pitchers with 10 or more starts for 15 years and 3000 innings pitched are roughly equal. Roger Clemens is not like every other pitcher in this group. He is considered perhaps the best pitcher of his generation. The professors make the mistake of thinking that his career arc should look like the arc of every other pitcher in their selected group.

Clemens, Curt Schilling, Randy Johnson, and Nolan Ryan were all highly successful in the second halves of their careers, and cannot properly be compared to pitchers who did not pitch effectively into their late 30's and 40's. The professors readily admit that Schilling, Johnson, and Ryan pitched well late in their careers. The professors state that there is no way to relate career performance trends to performance enhancing drugs. But they state that Clemens' late-career performance 'raises suspicion'. Therefore these 'statisticians' are engaging in precisely the kind of insinuation with their words that they say cannot be proven by statistics.

*** Variables:** There are many variables at work that affect a starting pitcher's longevity. For example, Roger Clemens¹ workout regimen, which has been often cited as a significant factor in his success, has certainly extended his career. Nolan Ryan was also known for his dedication to a challenging workout regimen, and, like Clemens, he enjoyed late career success. Just because it is difficult to measure the impact of a challenging workout regimen does not mean it does not favorably impact performance. Another factor that helped Clemens remain effective was his ability to adjust his pitching style over time, something the professors choose to disregard because pitch selection is not quantified in the report. Factors like Clemens' workout regimen and his effective use of the split-finger fastball are not subject to easy statistical analysis. This does not mean that these factors should be ignored. Clemens' intense workout regimen and his use of the split-finger fastball have been extensively observed and commented on over

the course of his career. This is why baseball clubs employ scouts in addition to statisticians - because there are elements of the game of baseball that are extremely relevant to performance, even if they are not easily reduced to statistics.

*** ERA:** The professors say ERA can be unreliable as a basis for analysis because of the impact defense has on ERA. First, the Clemens Report uses ERA Margin, which is an advanced version of ERA that takes into account league differences. Second, ERA Margin and similar versions of ERA are widely accepted throughout baseball as superior measures of the quality of starting pitchers, something ignored by the Wharton professors. Third, the Clemens Report additionally provides thorough analyses of strikeouts, innings pitched, and pitch counts.

In using hits plus walks per innings pitched, the professors substitute a less comprehensive measure for ERA-based statistics by choosing to analyze just one of the many subcomponents of ERA. Furthermore, they make the mistake of not recognizing that hits are more dependent on defense than any other subcomponent of ERA. Hits are heavily dependent on the skills of the fielders, especially their range in the field. A shortstop with more range will reach more balls and prevent more hits than a fielder with poor range. So the statistic the professors choose to apply in their analysis is, ironically, more affected by the very factor they criticize in ERA.

Additionally, ERA Margin adjusts for the changes in the game over time by comparing a pitcher's performance to the rest of the league at the time he played. The professors make no adjustments for any of the changes that have taken place in baseball over the last forty years, treating every hit and walk exactly the same, despite the lowering of the pitching mound, the tightening of the strike zone, the changes in equipment, the addition of the designated hitter, the introduction of modern ballparks, and other factors that have affected the game over the years. As a result, the professors are not correctly evaluating the statistics they have chosen to use for their comparisons.

*** Roger's age:** The Wharton professors state that "his performance declines as he enters his late 20's." This statement is demonstrably false. After the 1990 season, at age 28, Clemens was second in voting for the A.L. Cy Young Award behind Bob Welch, a season in which Clemens' ERA was 1.93. The next year, at age 29, he won the Cy Young Award. Pitching from the age of 27 to the age of 30, Clemens was an All Star in 1990, 1991 and 1992, and he achieved an ERA below 3.00 in each year. He turned 30 in August of 1992. These are clear indications that Clemens was not in a 'decline' in his late 20's, as asserted by the professors.

As Bill James stated in a salary arbitration case while working with Hendricks Sports Management, "Anyone can make a chart." The professors have proven this axiom, but they have not added anything substantive to a discussion of Roger Clemens' career.